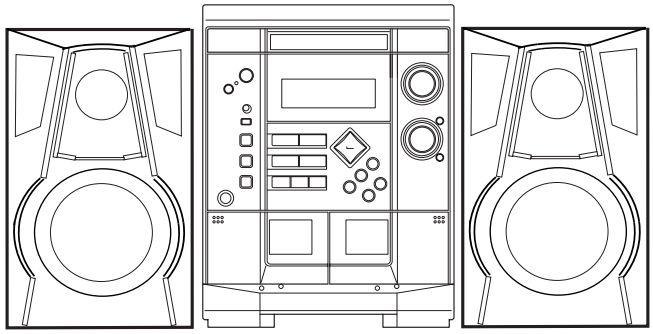
aiwa SERVICE

NSX-DS50 U
NSX-DS55 U



SERVICE MANUAL

COMPACT DISC
STEREO SYSTEM

BASIC TAPE MECHANISM : ZZM-3 PR3NM
BASIC CD MECHANISM : BZG-5 ZD3NM

SYSTEM	CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX-DS50	CX-NDS50	SX-NAJ502 SX-R290 SX-C610	RC-BAS10 VS
NSX-DS55	CX-NDS55		

• This Service Manual is the “Revision Publishing” and replaces “Simple Manual” of NSX-DS50 / DS55 <U>, (S/M Code No. 09-014-445-3T1).

• If requiring information about the CD mechanism, see Service Manual of BZG-5, (S/M Code No. 09-00C-353-3N2).

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S/M Code No. 09-017-445-3R1

REVISION DATA

SPECIFICATIONS

MAIN UNIT CX-NDS50 / CX-NDS55

TUNER

FM tuning range	87.5 MHz to 108 MHz
FM usable sensitivity (IHF)	13.2 dBf
FM antenna terminals	75 ohms (unbalanced)
AM tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
AM usable sensitivity	350 µV/m
AM antenna	Loop antenna

AMPLIFIER

Power output	Front: 70 W + 70 W (50 Hz - 20 kHz, THD less than 1 %, 6 ohms) 88 W + 88 W (1 kHz, THD less than 10 %, 6 ohms) Rear (Surround): 25 W + 25 W (1 kHz, THD less than 1 %, 8 ohms) 35 W + 35 W (1 kHz, THD less than 10 %, 8 ohms) Center: 25 (1 kHz, THD less than 1 %, 8 ohms) 35 W (1 kHz, THD less than 10 %, 8 ohms)
Total harmonic distortion	0.1 % (35 W, 1 kHz, 6 ohms, DIN AUDIO/Front)
Inputs	VIDEO/AUX/DVD: 300 mV (adjustable) DIGITAL IN (PCM/DOLBY DIGITAL) OPTICAL (VIDEO/AUX/DVD): Linear PCM signals (32 kHz, 44.1 kHz and 48 kHz) and Dolby Digital bitstream
Outputs	FRONT SPEAKERS: 6 ohms or more SURROUND SPEAKERS: 8 ohms to 16 ohms CENTER SPEAKER: 8 ohms or more SUB WOOFER: 1 V PHONES: 32 ohms or more

CASSETTE DECK

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz - 15 kHz
Recording system	AC bias
Heads	Deck 1: playback x 1 Deck 2: recording/playback x 1, erase x 1

CD PLAYER

Laser	Semiconductor laser (λ = 780 nm)
D/A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)

GENERAL

Power requirements	120 V AC, 60 Hz
Power consumption	175 W
Power consumption in standby mode	With ECO mode on: 0.6 W With ECO mode off: 35 W
Dimensions (W x H x D)	260 x 326 x 340 mm ($10^{1}/_{4}$ x $12^{7}/_{8}$ x $13^{1}/_{2}$ in.)
Weight of main unit	8.2 kg (18 lbs 1 oz)

FRONT SPEAKERS SX-NAJ502

Speaker system	3 way, bass reflex (magnetic shielded)
Speaker units	Woofer: 160 mm ($6^{3}/_{8}$ in.) cone Tweeter: 60 mm ($2^{3}/_{8}$ in.) cone Super tweeter: 20 mm ($^{13}/_{16}$ in.) ceramic
Impedance	6 ohms
Dimensions (W x H x D)	230 x 324 x 253 mm ($9^{1}/_{8}$ x $12^{7}/_{8}$ x 14 in.)
Weight	4.5 kg (9 lbs 15 oz)

SURROUND SPEAKERS SX-R290

Speaker system	1 way, bass reflex
Speaker units	Full range: 100 mm (4 in.) cone
Impedance	8 ohms
Dimensions (W x H x D)	150 x 132 x 142 mm (6 x $5^{1}/_{4}$ x $5^{5}/_{8}$ in.)
Weight	0.8 kg (1 lbs 12 oz)
Accessories	Wall mounting screws (2)

CENTER SPEAKER SX-C610

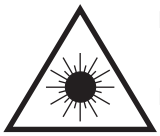
Speaker system	1 way, bass reflex
Speaker units	Full range: 100 mm (4 in.) cone
Impedance	8 ohms
Dimensions (W x H x D)	260 x 132 x 216 mm ($10^{1}/_{4}$ x $5^{1}/_{4}$ x $8^{5}/_{8}$ in.)
Weight	1.0 kg (2 lbs 3 oz)

- Design and specifications are subject to change without notice.
- The word "BBE"and the "BBE symbol" are trademarks of BBE Sound, Inc.
  Under license from BBE Sound,Inc.
- Manufactured under license from Dolby Laboratories Licensing Corporation.
  "DOLBY", the double-D symbol ▯▯ and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!
Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saataa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

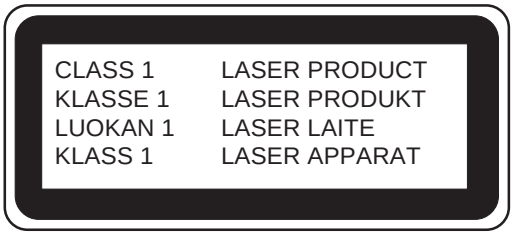
VARNING!
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herin may result in hazardous radiation exposure.

ATTENTION
L'utillisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL
Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

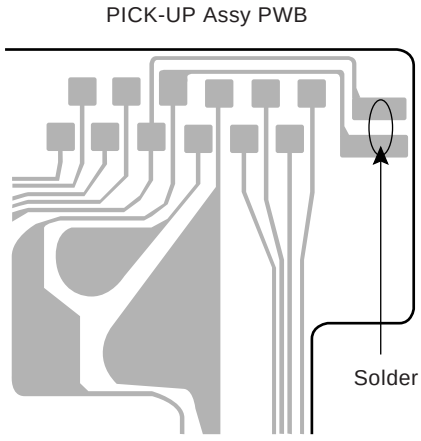


Precaution to replace Optical block

(KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in right figure.



NOTE ON BEFORE STARTING REPAIR

1. Forced discharge of electrolytic capacitor of power supply block

When repair is going to be attempted in the set that uses relay circuit in the power supply block, electric potential is kept charged across the electrolytic capacitors (C101, 102) even though AC power cord is removed. If repair is attempted in this condition, secondary defect can occur.
In order to prevent the secondary trouble, perform the following measures before starting repair work.

Discharge procedure

① Remove the AC power cord.
② Connect a discharging resistor at an end of lead wire that has clips at both ends. Connect the other end of the lead wire to metal chassis.
③ Contact the other end of the discharging resistor to the positive (+) side (+VH) of C101. (For two seconds)
④ Contact the same end of the discharging resistor as step ③ to the negative (-) side (-VH) of C102 in the same way. (For two seconds)
⑤ Check that voltage across C101 and C102 has decreased to 1 V or less using a multimeter or an oscilloscope.

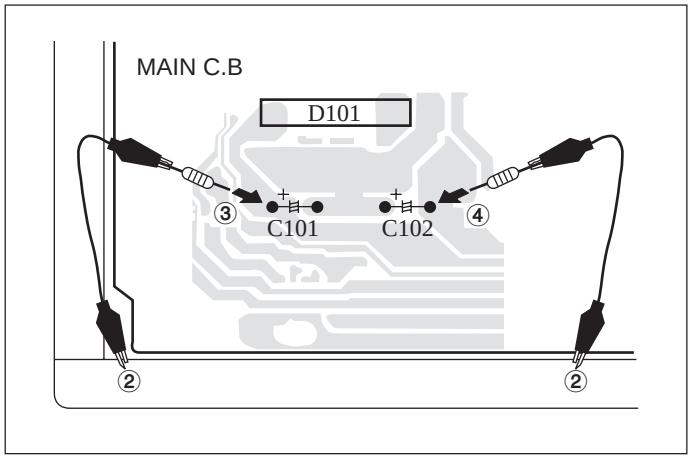


Fig-1

Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor (Ω)	Rated power (W)	Parts number
25-48	100	3	87-A00-247-090
49-140	220	5	87-A00-232-090

Note: The reference numbers (C101, C102) of the electrolytic capacitors can change depending on the models. Be sure to check the reference numbers of the charging capacitors on schematic diagram before starting the discharging work.

2. Check items before exchanging the MICROCOMPUTER

Be sure to check the following items before exchanging the MICROCOMPUTER. Exchange the MICROCOMPUTER after confirming that the MICROCOMPUTER is surely defective.

2-1. Regarding the HOLD terminal of the MICROCOMPUTER

When the HOLD terminal (INPUT) of the MICROCOMPUTER is "H", the MICROCOMPUTER is judged to be operating correctly. When this terminal is "L", the main power cannot be turned on. Therefore, be sure to check the terminal voltage of the HOLD terminal before exchange.
When the MICROCOMPUTER is not defective, the HOLD terminal can also go "L" when the POWER AMPLIFIER has any abnormalities that triggers the abnormality detection circuit on the MAIN C. B. that sets the HOLD terminal to "L".

- Good or no good judgement of the MICROCOMPUTER

① Turn on the AC main power.
② Confirm that the main power is turned on and the HOLD terminal of the MICROCOMPUTER keeps the "H" level or not.
③ When the HOLD terminal is "L" level, the abnormality detection circuit is judged to be working correctly and the MICROCOMPUTER is judged to be good.

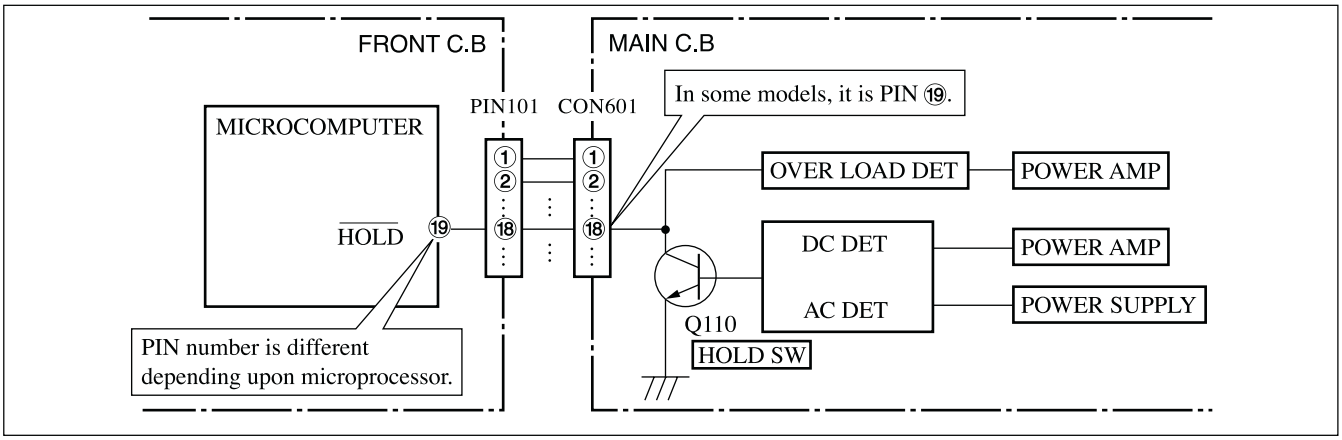


Fig-2-1

In such a case, check also if the POWER AMPLIFIER circuit or power supply circuit has any abnormalities or not.

2-2. Regarding reset

There are cases that the machine does not work correctly because the MICROCOMPUTER is not reset even though the AC power cord is re-inserted, or the software reset (pressing the STOP key + POWER key) is performed.
When the above described phenomenon occurs, it can lead to wrong judgement as if the MICROCOMPUTER is defective and to exchange the MICROCOMPUTER. In such a case, perform the forced-reset by the following procedure and check good or no good of the MICROCOMPUTER.

① Remove the AC power cord.

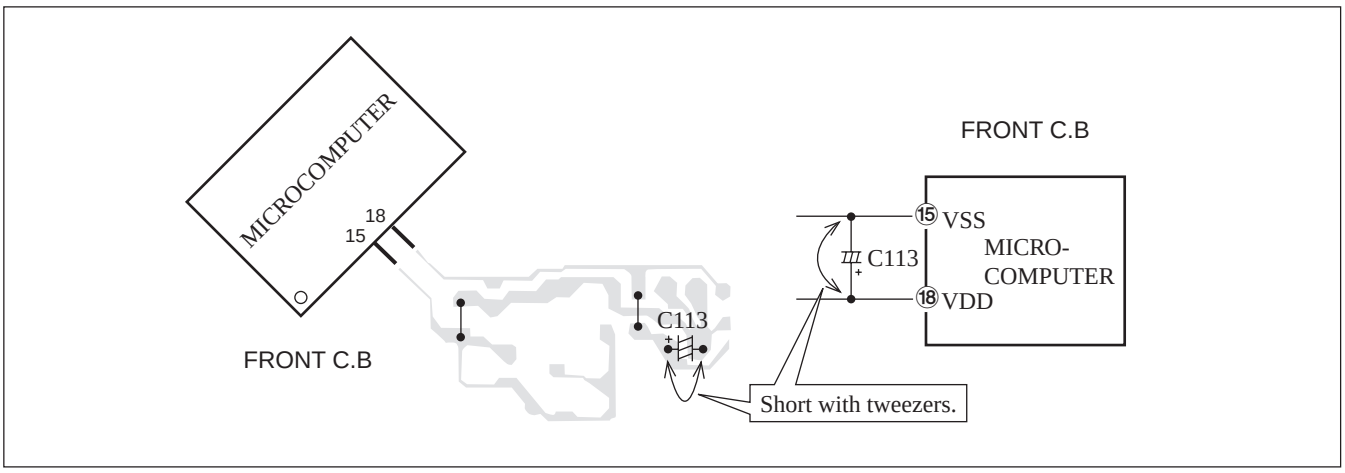


Fig-2-2

② Short both ends of the electrolytic capacitor C113 that is connected to VDD of the MICROCOMPUTER with tweezers.
③ Connect the AC power cord again. If the MICROCOMPUTER returns to the normal operation, the MICROCOMPUTER is good.

Note: The reference number or MICROCOMPUTER pin number of transistor (Q110) and electrolytic capacitor (C113) can change depending on the models. Be sure to check the reference numbers on schematic diagram before starting the discharging work.

2-3. Confirmation of soldering state of MICROCOMPUTER

Check the soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A21-893-040		C-IC,NJM14558V-TE2
	87-A20-783-040		C-IC,BA7762AFS
	87-A21-703-040		C-IC,SN74LV244APW
	87-A21-916-040		C-IC,SN74LV125APW
	87-A21-884-040		C-IC,CS4228A
	87-A21-882-030		C-IC,M62466FP
	87-A21-883-040		C-IC,CS8415A
	87-A20-921-040		C-IC,SN74LVU04APW
	87-A20-870-010		IC,GP1F37R
	87-A21-885-040		C-IC,CS49326
	87-A21-695-010		IC,LA1845L
	8B-NCK-601-030		C-IC,UPD784975AGF-102-3BA
	87-A21-831-010		IC,SPS-442-1-F1
	87-A21-928-010		IC,LC72131D-N
	87-070-289-040		C-IC,BU2092F
	87-020-903-010		IC,NJM7805FA
	87-A21-269-010		IC,EW732
TRANSISTOR			
	87-026-609-080		TR,KTA1266GR
	87-A30-559-010		TR,CSB1370EF
	87-026-610-080		TR,KTC3198GR
	87-A30-076-080		C-TR,2SC3052F
	87-A30-075-080		C-TR,2SA1235F
	87-A30-495-080		TR,2SA1981Y
	87-A30-074-080		C-TR,RT1P141C
	87-A30-468-080		C-TR,KRC102S-RTK
	87-A30-106-040		C-TR,CMBT5551
	87-A30-086-040		C-TR,CSD1306E
	87-A30-256-010		TR,2SD1933
	87-A30-255-010		TR,2SB1342
	87-A30-107-070		C-TR,CMBT5401
	87-A30-484-080		C-TR,KRA102S
	87-A30-494-080		TR,2SA1980G
	87-A30-190-080		TR,CC5551
	87-A30-529-010		TR,2SD2642
	87-A30-528-010		TR,2SB1686
	87-A30-105-080		C-TR,RT1P441C
	87-A30-162-010		FET,2SK2937
	87-A30-087-080		C-FET,2SK2158
	87-A30-582-080		TR,CDA1585BC
	87-A30-234-080		TR,CSC4115BC
	87-A30-288-040		C-TR,DTC114YKA
	89-327-143-080		C-TR,2SC2714O
	87-A30-489-080		C-TR,KRA107S
DIODE			
	87-A40-839-090		DIODE,G5SBA60L-6088
	87-A40-291-080		DIODE,1N4148M(CPT)
	87-A40-838-090		DIODE,G3SBA60L-6088
	87-A40-553-080		DIODE,1N4003 LES
	87-A40-778-080		ZENER,UZ30BSD
	87-A40-764-080		ZENER,UZ10BSC
	87-A40-270-080		C-DIODE,MC2838
	87-A40-269-080		C-DIODE,MC2836
	87-A40-488-080		DIODE,1SS244
	87-A40-202-080		ZENER,UZ5.1BSB
	87-A40-749-080		ZENER,UZ5.6BSB
	87-A40-393-090		DIODE,1N5402GW(F20)
	87-A40-748-080		ZENER,UZ5.6BSA
	87-A40-747-080		ZENER,UZ5.1BSB
	87-A40-745-080		ZENER,UZ4.7BSA
	87-A40-739-080		ZENER,UZ 2.7BSA
	87-017-149-080		ZENER,HZS6A2L

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
MAIN C.B			
C5	87-012-368-080		C-CAP,S 0.1-50 F
C6	87-012-368-080		C-CAP,S 0.1-50 F
C7	87-012-368-080		C-CAP,S 0.1-50 F
C8	87-012-368-080		C-CAP,S 0.1-50 F
C9	87-012-368-080		C-CAP,S 0.1-50 F
C10	87-012-368-080		C-CAP,S 0.1-50 F
C11	87-012-368-080		C-CAP,S 0.1-50 F
C12	87-012-368-080		C-CAP,S 0.1-50 F
C21	87-A12-780-090		CAP,E 4700-35 M 85 SKR
C22	87-A12-780-090		CAP,E 4700-35 M 85 SKR
C23	87-A12-779-090		CAP,E 3300-50 M 85 SKR
C24	87-A12-779-090		CAP,E 3300-50 M 85 SKR
C25	87-A12-095-080		CAP,E 100-50 SMG
C26	87-A12-095-080		CAP,E 100-50 SMG
C27	87-A12-095-080		CAP,E 100-50 SMG
C28	87-A12-095-080		CAP,E 100-50 SMG
C30	87-010-430-080		CAP, ELECT 100-63
C31	87-A12-062-080		CAP,E 100-10 SMG
C32	87-012-286-080		CAP, U 0.01-25
C33	87-A12-062-080		CAP,E 100-10 SMG
C34	87-A12-095-080		CAP,E 100-50 SMG
C35	87-A12-076-080		CAP,E 22-35 SMG
C36	87-A12-068-080		CAP,E 470-16 SMG
C40	87-012-286-080		CAP, U 0.01-25
C60	87-A12-089-080		CAP,E 3.3-50 SMG
C63	87-A12-071-080		CAP,E 47-25 SMG
C81	87-A10-918-080		CAP,E 100-16 SMG
C97	87-010-831-080		C-CAP,U,0.1-16F
C101	87-A12-087-080		CAP,E 1-50 SMG
C102	87-A12-087-080		CAP,E 1-50 SMG
C110	87-010-831-080		C-CAP,U 0.1-16 Z F
C111	87-A12-088-080		CAP,E 2.2-50 SMG
C112	87-A12-088-080		CAP,E 2.2-50 SMG
C113	87-A12-075-080		CAP,E 10-35 SMG
C121	87-A12-088-080		CAP,E 2.2-50 SMG
C122	87-A12-086-080		CAP,E 0.47-50 SMG
C145	87-012-368-080		C-CAP,S 0.1-50 F
C146	87-012-368-080		C-CAP,S 0.1-50 F
C147	87-012-368-080		C-CAP,S 0.1-50 F
C148	87-012-368-080		C-CAP,S 0.1-50 F
C155	87-010-831-080		C-CAP,U,0.1-16F
C170	87-012-278-080		C-CAP,U 2200P-50 B
C171	87-012-282-080		CAP, U 4700P-50
C173	87-010-759-080		C-CAP,U, 0.1-25F
C201	87-012-281-080		C-CAP,U 3900P-50 B
C202	87-012-281-080		C-CAP,U 3900P-50 B
C203	87-A12-084-080		CAP,E 0.22-50 SMG
C204	87-A12-084-080		CAP,E 0.22-50 SMG
C205	87-012-282-080		CAP, U 4700P-50
C206	87-012-282-080		CAP, U 4700P-50
C207	87-A12-090-080		CAP,E 4.7-50 SMG
C208	87-A12-090-080		CAP,E 4.7-50 SMG
C209	87-016-615-080		C-CAP,U 2.2P-50CH
C210	87-016-615-080		C-CAP,U 2.2P-50CH
C211	87-A12-078-080		CAP,E 47-35 SMG
C212	87-A12-078-080		CAP,E 47-35 SMG
C215	87-012-273-080		C-CAP,U 820P-50 B
C216	87-012-273-080		C-CAP,U 820P-50 B
C217	87-A10-596-080		C-CAP,S 100P-100 J CH
C218	87-A10-596-080		C-CAP,S 100P-100 J CH
C219	87-012-368-080		C-CAP,S 0.1-50 F
C220	87-012-368-080		C-CAP,S 0.1-50 F
C221	87-012-286-080		CAP, U 0.01-25
C222	87-012-286-080		CAP, U 0.01-25
C223	87-A10-596-080		C-CAP,S 100P-100 J CH
C224	87-A10-596-080		C-CAP,S 100P-100 J CH
C273	87-010-759-080		C-CAP,U, 0.1-25F
C274	87-A12-091-080		CAP,E 10-50 SMG

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C275	87-A12-091-080		CAP,E 10-50 SMG
C301	87-012-278-080		C-CAP,U 2200P-50 B
C301	87-012-188-080		C-CAP,U 47P-50 CH
C302	87-012-188-080		C-CAP,U 47P-50 CH
C303	87-012-268-080		C-CAP,U 330P-50 B
C304	87-012-268-080		C-CAP,U 330P-50 B
C305	87-012-268-080		C-CAP,U 330P-50 B
C306	87-012-268-080		C-CAP,U 330P-50 B
C307	87-010-759-080		C-CAP,U, 0.1-25F
C309	87-010-759-080		C-CAP,U, 0.1-25F
C310	87-010-759-080		C-CAP,U, 0.1-25F
C311	87-010-787-080		CAP, U 0.022-25
C312	87-010-787-080		CAP, U 0.022-25
C313	87-012-276-080		CAP, CHIP SS 1500 PBK
C314	87-012-276-080		CAP, CHIP SS 1500 PBK
C315	87-012-278-080		C-CAP,U 2200P-50 B
C316	87-012-278-080		C-CAP,U 2200P-50 B
C321	87-012-142-080		CAP, S 0.33-16
C322	87-012-142-080		CAP, S 0.33-16
C324	87-A12-071-080		CAP,E 47-25 SMG
C325	87-A12-057-080		CAP,E 330-6.3 SMG
C327	87-A12-090-080		CAP,E 4.7-50 SMG
C328	87-A12-090-080		CAP,E 4.7-50 SMG
C332	87-010-759-080		C-CAP,U, 0.1-25F
C333	87-016-251-080		CAP,E 220-16 M SMG
C335	87-A12-087-080		CAP,E 1-50 SMG
C336	87-A12-087-080		CAP,E 1-50 SMG
C337	87-010-759-080		C-CAP,U, 0.1-25F
C339	87-010-759-080		C-CAP,U, 0.1-25F
C340	87-010-759-080		C-CAP,U, 0.1-25F
C351	87-012-270-080		CAP, U 470P-50
C352	87-012-270-080		CAP, U 470P-50
C354	87-012-271-080		CAP, U 560P-50
C355	87-012-274-080		CHIP CAP,U 1000P-50B
C356	87-A12-071-080		CAP,E 47-25 SMG
C357	87-012-286-080		CAP, U 0.01-25
C358	87-012-279-080		C-CAP,U 2700P-50 B
C359	87-012-279-080		C-CAP,U 2700P-50 B
C360	87-012-279-080		C-CAP,U 2700P-50 B
C363	87-A12-361-080		CAP,M 5600P-100 J CP
C370	87-010-759-080		C-CAP,U, 0.1-25F
C373	87-A10-060-080		C-CAP,S 0.18-16 K B
C374	87-A10-060-080		C-CAP,S 0.18-16 K B
C378	87-010-759-080		C-CAP,U, 0.1-25F
C379	87-A12-069-080		CAP,E 22-25 SMG
C380	87-A12-069-080		CAP,E 22-25 SMG
C386	87-010-759-080		C-CAP,U, 0.1-25F
C388	87-012-266-080		C-CAP,U 220P-50 B
C391	87-012-191-080		C-CAP,U 56P-50 J CH
C392	87-012-191-080		C-CAP,U 56P-50 J CH
C393	87-012-191-080		C-CAP,U 56P-50 J CH
C394	87-012-191-080		C-CAP,U 56P-50 J CH
C619	87-010-831-080		C-CAP,U,0.1-16F
C621	87-012-278-080		C-CAP, U 2200P-50 K B
C622	87-012-278-080		C-CAP, U 2200P-50 K B
C633	87-012-281-080		C-CAP,U 3900P-50 B
C634	87-016-369-080		C-CAP,S 0.033-25 B K
C635	87-012-281-080		C-CAP,U 3900P-50 B
C636	87-016-369-080		C-CAP,S 0.033-25 B K
C637	87-A12-088-080		CAP,E 2.2-50 SMG
C638	87-A12-088-080		CAP,E 2.2-50 SMG
C656	87-A10-260-080		C-CAP,U 0.1-16 K B
C675	87-012-282-080		CAP, U 4700P-50
C676	87-012-282-080		CAP, U 4700P-50
C683	87-A11-969-080		C-CAP,U 0.082U-16 K B
C684	87-A12-075-080		CAP,E 10-35 SMG
C685	87-012-167-080		C-CAP,U 5P-50 CH
C686	87-010-759-080		C-CAP,U, 0.1-25F
C687	87-010-759-080		C-CAP,U, 0.1-25F
C688	87-A12-062-080		CAP,E 100-10 SMG
C689	87-A12-058-080		CAP,E 470-6.3 M SMG
C701	87-012-195-080		C-CAP,U 100P-50CH
C702	87-012-195-080		C-CAP,U 100P-50CH
C703	87-012-286-080		CAP, U 0.01-25
C707	87-A12-088-080		CAP,E 2.2-50 SMG
C708	87-A12-088-080		CAP,E 2.2-50 SMG
C772	87-012-286-080		CAP, U 0.01-25
C782	87-012-286-080		CAP, U 0.01-25
C783	87-012-286-080		CAP, U 0.01-25
C784	87-012-286-080		CAP, U 0.01-25
C785	87-012-286-080		CAP, U 0.01-25
C786	87-012-286-080		CAP, U 0.01-25
C788	87-012-167-080		C-CAP,U 5P-50 CH
C789	87-A12-052-080		C-CAP,S 0.033-25 J B
C790	87-A12-052-080		C-CAP,S 0.033-25 J B
C791	87-010-831-080		C-CAP,U,0.1-16F
C792	87-012-286-080		CAP, U 0.01-25
C793	87-A12-090-080		CAP,E 4.7-50 SMG
C795	87-012-286-080		CAP, U 0.01-25
C796	87-012-286-080		CAP, U 0.01-25
C797	87-A12-091-080		CAP,E 10-50 SMG
C798	87-012-286-080		CAP, U 0.01-25
C799	87-A12-093-080		CAP,E 33-50 SMG
C800	87-010-829-080		CAP, U 0.047-16
C801	87-A12-089-080		CAP,E 3.3-50 SMG
C802	87-010-829-080		CAP, U 0.047-16
C803	87-010-787-080		CAP, U 0.022-25
C803	87-012-280-080		CAP, U 3300P-50
C804	87-A12-062-080		CAP,E 100-10 SMG
C807	87-A12-086-080		CAP,E 0.47-50 SMG
C808	87-A12-087-080		CAP,E 1-50 SMG
C809	87-A12-087-080		CAP,E 1-50 SMG
C810	87-010-831-080		C-CAP,U,0.1-16F
C814	87-012-286-080		CAP, U 0.01-25
C815	87-A12-086-080		CAP,E 0.47-50 SMG
C816	87-A12-086-080		CAP,E 0.47-50 SMG
C821	87-A12-091-080		CAP,E 10-50 SMG
C823	87-010-177-080		C-CAP,S 820P-50 SL
C824	87-A12-090-080		CAP,E 4.7-50 SMG
C825	87-010-596-080		CAP, S 0.047-16
C831	87-010-406-080		CAP, ELECT 22-50
C842	87-012-286-080		CAP, U 0.01-25
C844	87-012-286-080		CAP, U 0.01-25
C850	87-A12-071-080		CAP,E 47-25 SMG
C851	87-012-286-080		CAP, U 0.01-25
C852	87-012-286-080		CAP, U 0.01-25
C853	87-012-286-080		CAP, U 0.01-25
C858	87-010-831-080		C-CAP,U,0.1-16F
C859	87-010-759-080		C-CAP,U, 0.1-25F
C860	87-012-286-080		CAP, U 0.01-25
C913	87-012-286-080		CAP, U 0.01-25
C918	87-A10-039-080		C-CAP,U 470P-50 J CH
C959	87-010-831-080		C-CAP,U 0.1-16F
C960	87-010-831-080		C-CAP,U,0.1-16F
C961	87-012-167-080		C-CAP,U 5P-50 CH
C963	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z
C971	87-A12-067-080		CAP,E 330-16 SMG
C972	87-A12-090-080		CAP,E 4.7-50 SMG
C973	87-012-286-080		CAP, U 0.01-25
C974	87-012-286-080		CAP, U 0.01-25
C979	87-012-195-080		C-CAP,U 100P-50CH
C981	87-A12-071-080		CAP,E 47-25 SMG
C982	87-010-831-080		C-CAP,U,0.1-16F
C983	87-012-286-080		CAP, U 0.01-25
C984	87-012-286-080		CAP, U 0.01-25
C987	87-012-286-080		CAP, U 0.01-25
C991	87-012-176-080		CAP 15P
C992	87-012-176-080		CAP 15P
C993	87-012-274-080		CHIP CAP,U 1000P-50B
C995	87-012-274-080		CHIP CAP,U 1000P-50B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C997	87-010-831-080		C-CAP,U,0.1-16F
C998	87-A12-071-080		CAP,E 47-25 SMG
C999	87-A11-155-080		CAP,TC U 0.01-16 Z F
CF831	87-008-261-010		FILTER, SFE10.7MA5
CF832	87-008-261-010		FILTER, SFE10.7MA5
CN105	87-099-195-010		CONN,7P V BLK 6216
CN183	87-099-564-010		CONN,4P V TUC-P4P-B1
CN301	87-A60-620-010		CONN,3P V 2MM JMT
CN351	87-A60-625-010		CONN,8P V 2MM JMT
CN601	87-099-719-010		CONN,30P H BLK(X)
CN701	87-A60-061-010		CONN,06P V 9604S-06C
CN703	87-010-385-040		CAP,E 220-25 M SME
CNA1	8A-NF6-646-010		CONN ASSY,9P TID-A(460)
CNA102	8A-NF8-655-010		CONN ASSY,7P TID-A(150)
CNA602	87-A60-632-010		CONN 15P V 2MM JMT
FFC105	88-907-121-110		FF-CABLE,7P 120
FFC701	88-906-251-110		FF-CABLE,6P 1.25
FFE831	A8-6ZA-19M-030		6ZA-1 YFEMENM
J101	87-A60-929-010		JACK,DIA6.3 BLK ST W/S TAI
J102	87-A60-238-010		TERMINAL,SP 4P (MSC)
J603	87-A60-881-010		JACK,PIN 2P MSP 242V05 PBSN
J831	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02
L141	87-A50-610-010		COIL,1UH K(MDEC)
L142	87-A50-610-010		COIL,1UH K(MDEC)
L301	87-A50-625-010		COIL,TRAP 85KHZ (SANWA)
L302	87-A50-625-010		COIL,TRAP 85KHZ (SANWA)
L351	87-007-342-010		COIL,OSC 85KHZ BIAS
L801	87-A50-608-010		COIL,FM DET-N(TOK)
L802	87-A91-552-010		FLTR,MT-450AL(TOK)
L811	87-005-847-080		COIL,2.2UH K CECS
L832	87-005-847-080		COIL,2.2UH K CECS
L909	87-A91-639-010		TRANS,BALUN FM
L951	8A-NF8-667-010		COIL,AM PACK 4(TOK)
R85	87-A00-436-050		RES,100-1/2W J RP
R86	87-A00-436-050		RES,100-1/2W J RP
R87	87-A00-436-050		RES,100-1/2W J RP
R88	87-A00-436-050		RES,100-1/2W J RP
R149	87-A01-001-050		RES,220-1/2W J BLT2J
R150	87-A01-001-050		RES,220-1/2W J BLT2J
R151	87-A01-001-050		RES,220-1/2W J BLT2J
R152	87-A01-001-050		RES,220-1/2W J BLT2J
R255	87-A00-262-080		RES,M/F 0.15-2W J
R256	87-A00-262-080		RES,M/F 0.15-2W J
R259	87-A00-262-080		RES,M/F 0.15-2W J
R260	87-A00-262-080		RES,M/F 0.15-2W J
R790	87-012-286-080		CAP, U 0.01-25
R991	87-012-195-080		C-CAP,U 100P-50CH
R993	87-012-195-080		C-CAP,U 100P-50CH
R995	87-012-195-080		C-CAP,U 100P-50CH
SFR351	87-A90-433-080		SFR,50K H NVZ6TLTA
SFR352	87-A90-433-080		SFR,50K H NVZ6TLTA
TH201	87-A91-042-080		C-THMS,100K 55001
TH202	87-A91-042-080		C-THMS,100K 55001
WH1	87-A90-510-010		HLDR,WIRE 2.5-9P
WH102	87-A90-460-010		HLDR,WIRE 2.5-7P
X992	87-A70-306-010		VIB,XTAL 4.500MHZ CSA-309ST

FRONT C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C153	87-010-787-080		CAP, U 0.022-25
C154	87-A12-078-040		CAP,E 47-35 SMG
C155	87-010-404-040		CAP,E 4.7-50 SME
C156	87-010-404-040		CAP,E 4.7-50 SME
C301	87-012-278-080		C-CAP,U 2200P-50 K B
C351	87-A10-201-080		C-CAP,S 0.33-16 K B
C361	87-012-274-080		CHIP CAP,U 1000P-50B
C362	87-012-274-080		CHIP CAP,U 1000P-50B
C371	87-012-274-080		CHIP CAP,U 1000P-50B
C372	87-012-274-080		CHIP CAP,U 1000P-50B
C501	87-012-195-080		C-CAP,U 100P-50CH
C502	87-012-195-080		C-CAP,U 100P-50CH
C503	87-012-195-080		C-CAP,U 100P-50CH
C504	87-010-759-080		C-CAP,U, 0.1-25F
C601	87-010-382-040		CAP,E 22-25 SME
C801	87-A10-804-080		C-CAP,S 0.1-25 J B
C802	87-010-316-080		C-CAP,S 33P-50 CH
C803	87-012-280-080		C-CAP,U 3300P-50 K B
C804	87-A10-592-080		C-CAP,S 0.015-50
C805	87-012-184-080		C-CAP,U 33P-50 CH
C806	87-012-274-080		CHIP CAP,U 1000P-50B
C807	87-012-274-080		CHIP CAP,U 1000P-50B
C808	87-010-544-040		CAP,E 0.1-50 SME
C809	87-010-404-040		CAP,E 4.7-50 SME
C810	87-016-114-080		C-CAP,U0.01-25B
C811	87-A12-052-080		C-CAP,S 0.033-25 J B
C901	87-012-195-080		C-CAP,U 100P-50CH
C902	87-012-195-080		C-CAP,U 100P-50CH
C903	87-012-195-080		C-CAP,U 100P-50CH
C904	87-012-195-080		C-CAP,U 100P-50CH
C905	87-012-195-080		C-CAP,U 100P-50CH
C906	87-012-195-080		C-CAP,U 100P-50CH
C907	87-012-195-080		C-CAP,U 100P-50CH
C908	87-012-195-080		C-CAP,U 100P-50CH
C909	87-012-195-080		C-CAP,U 100P-50CH
C910	87-012-195-080		C-CAP,U 100P-50CH
C911	87-012-274-080		CHIP CAP,U 1000P-50B
C912	87-010-759-080		C-CAP,U, 0.1-25F
C913	87-A11-242-040		CAP,E 220-10 M 5L SRM
C914	87-A11-242-040		CAP,E 220-10 M 5L SRM
C915	87-010-759-080		C-CAP,U, 0.1-25F
C916	87-010-759-080		C-CAP,U, 0.1-25F
C917	87-010-759-080		C-CAP,U, 0.1-25F
C919	87-012-286-080		CAP, U 0.01-25
C920	87-010-757-080		C.CAP,U 0.047-25F
C921	87-012-282-080		CAP, U 4700P-50
C951	87-012-176-080		C-CAP,U 15P-50 J CH
C952	87-012-198-080		C-CAP,U 180P-50 J CH
C953	87-A10-039-080		C-CAP,U 470P-50 J CH
C961	87-010-378-040		CAP,E 10-16
C962	87-012-157-080		C-CAP,S 330P-50 CH
C963	87-010-759-080		C-CAP,U, 0.1-25F
CN104	87-A60-057-010		CONN,11P V 9604S-11C
CN701	87-099-720-010		CONN,30P BLK B(P)
CN731	87-099-196-010		CONN,8P V BLK 6216
CN732	87-099-014-010		CONN,12P V BLK 6216
FFC104	88-911-101-110		FF-CABLE, 11P 1.25
FFC731	88-908-301-110		FF-CABLE, 8P 1.25
FFC732	88-912-371-110		FF-CABLE,12P 1.25 37
FL901	8B-NCK-605-010		FL,HNA-08MM29
L951	87-A50-652-010		COIL,OSC 15.6MHZ
LED201	87-A40-606-040		LED,SLR-332VC
LED202	87-A40-606-040		LED,SLR-332VC
LED203	87-A40-606-040		LED,SLR-332VC
LED204	87-A40-606-040		LED,SLR-332VC
LED209	87-A40-317-080		LED,SLR-342VCT31 RED
S321	87-A90-095-080		SW,TACT EVQ11G04M
S322	87-A90-095-080		SW,TACT EVQ11G04M
S323	87-A90-095-080		SW,TACT EVQ11G04M
S324	87-A90-095-080		SW,TACT EVQ11G04M
S325	87-A90-095-080		SW,TACT EVQ11G04M
S326	87-A90-095-080		SW,TACT EVQ11G04M
S327	87-A90-095-080		SW,TACT EVQ11G04M
S328	87-A90-095-080		SW,TACT EVQ11G04M
S329	87-A90-095-080		SW,TACT EVQ11G04M
S330	87-A90-095-080		SW,TACT EVQ11G04M
S331	87-A90-095-080		SW,TACT EVQ11G04M
S332	87-A90-095-080		SW,TACT EVQ11G04M
S333	87-A90-095-080		SW,TACT EVQ11G04M
S334	87-A90-095-080		SW,TACT EVQ11G04M

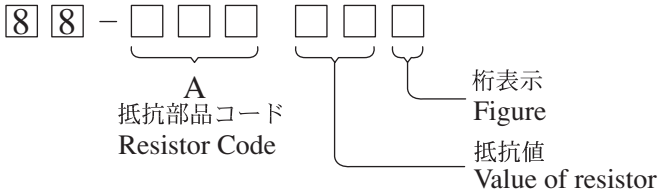
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
S335	87-A90-095-080		SW,TACT EVQ11G04M
S341	87-A90-095-080		SW,TACT EVQ11G04M
S342	87-A90-095-080		SW,TACT EVQ11G04M
S343	87-A90-095-080		SW,TACT EVQ11G04M
S344	87-A90-095-080		SW,TACT EVQ11G04M
S345	87-A90-095-080		SW,TACT EVQ11G04M
S346	87-A90-095-080		SW,TACT EVQ11G04M
S347	87-A90-095-080		SW,TACT EVQ11G04M
S348	87-A90-095-080		SW,TACT EVQ11G04M
S349	87-A90-095-080		SW,TACT EVQ11G04M
S361	87-A92-172-010		SW,RTRY EC12E24204-25MM OFF
S371	87-A92-057-010		SW,RTRY EC12E12504-25MM OFF
AC3 C.B			
C101	87-A12-091-080		CAP,E 10-50 SMG
C102	87-A12-091-080		CAP,E 10-50 SMG
C103	87-012-172-080		CAPACITOR CHIP U 10P CH
C104	87-012-172-080		CAPACITOR CHIP U 10P CH
C105	87-010-831-080		C-CAP,U,0.1-16F
C106	87-010-831-080		C-CAP,U,0.1-16F
C107	87-A12-091-080		CAP,E 10-50 SMG
C108	87-A12-091-080		CAP,E 10-50 SMG
C113	87-012-268-080		C-CAP,U 330P-50 B
C114	87-012-268-080		C-CAP,U 330P-50 B
C115	87-012-284-080		CAP, U 6800P-50
C116	87-012-284-080		CAP, U 6800P-50
C117	87-012-277-080		C-CAP,U 1800P-50 CH
C118	87-012-277-080		C-CAP,U 1800P-50 CH
C119	87-012-282-080		CAP, U 4700P-50
C120	87-012-282-080		CAP, U 4700P-50
C121	87-012-277-080		C-CAP,U 1800P-50 CH
C122	87-012-277-080		C-CAP,U 1800P-50 K B GRM
C123	87-A12-091-080		CAP,E 10-50 SMG
C124	87-A12-091-080		CAP,E 10-50 SMG
C125	87-A10-902-080		C-CAP,U 0.47-10 K B
C126	87-A12-091-080		CAP,E 10-50 SMG
C151	87-A12-091-080		CAP,E 10-50 SMG
C152	87-A12-091-080		CAP,E 10-50 SMG
C153	87-012-172-080		CAPACITOR CHIP U 10P CH
C154	87-012-172-080		CAPACITOR CHIP U 10P CH
C155	87-010-831-080		C-CAP,U,0.1-16F
C156	87-010-831-080		C-CAP,U,0.1-16F
C157	87-A10-902-080		C-CAP,U 0.47-10 K B
C161	87-012-268-080		C-CAP,U 330P-50 B
C162	87-012-268-080		C-CAP,U 330P-50 B
C163	87-010-831-080		C-CAP,U,0.1-16F
C164	87-010-831-080		C-CAP,U,0.1-16F
C165	87-012-284-080		CAP, U 6800P-50
C166	87-012-284-080		CAP, U 6800P-50
C167	87-012-277-080		C-CAP,U 1800P-50 K B GRM
C168	87-012-277-080		C-CAP,U 1800P-50 K B GRM
C169	87-012-277-080		C-CAP,U 1800P-50 K B GRM
C170	87-012-277-080		C-CAP,U 1800P-50 K B GRM
C171	87-012-282-080		CAP, U 4700P-50
C172	87-012-282-080		CAP, U 4700P-50
C173	87-A12-091-080		CAP,E 10-50 SMG
C174	87-A12-091-080		CAP,E 10-50 SMG
C201	87-A12-091-080		CAP,E 10-50 SMG
C202	87-A12-091-080		CAP,E 10-50 SMG
C203	87-012-172-080		CAPACITOR CHIP U 10P CH
C204	87-012-274-080		CHIP CAP,U 1000P-50B
C205	87-010-831-080		C-CAP,U,0.1-16F
C206	87-010-831-080		C-CAP,U,0.1-16F
C207	87-A10-902-080		C-CAP,U 0.47-10 K B
C211	87-012-268-080		C-CAP,U 330P-50 B
C212	87-016-115-080		C-CAP,U 0.012-25 J B
C213	87-010-831-080		C-CAP,U,0.1-16F
C214	87-010-831-080		C-CAP,U,0.1-16F
C215	87-012-284-080		CAP, U 6800P-50
C216	87-A11-538-080		C-CAP,S 0.12-25 J B
C217	87-012-277-080		C-CAP,U 1800P-50 K B GRM
C219	87-012-277-080		C-CAP,U 1800P-50 K B GRM
C221	87-012-282-080		CAP, U 4700P-50
C223	87-A12-091-080		CAP,E 10-50 SMG
C224	87-A12-091-080		CAP,E 10-50 SMG
C401	87-A10-260-080		C-CAP,U 0.1-16 K B
C404	87-A10-260-080		C-CAP,U 0.1-16 K B
C503	87-A12-088-080		CAP,E 2.2-50 SMG
C504	87-A12-088-080		CAP,E 2.2-50 SMG
C505	87-A12-090-080		CAP,E 4.7-50 SMG
C506	87-A12-090-080		CAP,E 4.7-50 SMG
C507	87-A12-090-080		CAP,E 4.7-50 SMG
C508	87-A12-090-080		CAP,E 4.7-50 SMG
C511	87-012-275-080		C-CAP,U 1200P-50
C512	87-012-275-080		C-CAP,U 1200P-50
C513	87-A10-918-080		CAP,E 100-16 SMG
C551	87-A10-047-080		C-CAP,U 1-10 Z F
C552	87-A10-047-080		C-CAP,U 1-10 Z F
C553	87-010-831-080		C-CAP,U 0.1-16 Z F
C601	87-A12-091-080		CAP,E 10-50 SMG
C602	87-A10-260-080		C-CAP,U 0.1-16 K B
C603	87-A12-091-080		CAP,E 10-50 SMG
C604	87-A10-260-080		C-CAP,U 0.1-16 K B
C606	87-012-195-080		C-CAP,U 100P-50CH
C617	87-A12-087-080		CAP,E 1-50 SMG
C618	87-010-831-080		C-CAP,U,0.1-16F
C621	87-A12-091-080		CAP,E 10-50 SMG
C624	87-A10-260-080		C-CAP,U 0.1-16 K B
C651	87-016-251-080		CAP,E 220-16 M SMG
C653	87-010-831-080		C-CAP,U,0.1-16F
C654	87-010-831-080		C-CAP,U,0.1-16F
C655	87-A12-087-080		CAP,E 1-50 SMG
C656	87-A12-091-080		CAP,E 10-50 SMG
C657	87-010-831-080		C-CAP,U,0.1-16F
C658	87-010-831-080		C-CAP,U,0.1-16F
C659	87-010-831-080		C-CAP,U,0.1-16F
C701	87-012-195-080		C-CAP,U 100P-50CH
C702	87-A11-969-080		C-CAP,S 0.082U-16 K B
C703	87-010-831-080		C-CAP,U,0.1-16F
C704	87-012-278-080		C-CAP,U 2200P-50 B
C706	87-012-180-080		C-CAP,U 470-50 J CH
C707	87-012-180-080		C-CAP,U 470-50 J CH
C709	87-012-180-080		C-CAP,U 470-50 J CH
C711	87-010-831-080		C-CAP,U,0.1-16F
C712	87-A12-062-080		CAP,E 100-10 SMG
C715	87-012-286-080		CAP, U 0.01-25
C721	87-012-167-080		C-CAP,U 5P-50 CH
C722	87-012-167-080		C-CAP,U 5P-50 CH
C723	87-010-831-080		C-CAP,U,0.1-16F
C751	87-012-278-080		C-CAP,U 2200P-50 B
C801	87-010-831-080		C-CAP,U,0.1-16F
C802	87-012-286-080		CAP, U 0.01-25
C804	87-012-270-080		CAP, U 470P-50
C805	87-A12-088-080		CAP,E 2.2-50 SMG
C810	87-012-267-080		C-CAP,U 270P-50 B
C818	87-010-831-080		C-CAP,U,0.1-16F
C819	87-A12-062-080		CAP,E 100-10 SMG
C820	87-010-831-080		C-CAP,U,0.1-16F
C823	87-010-831-080		C-CAP,U,0.1-16F
C824	87-A12-087-080		CAP,E 1-50 SMG
C825	87-A12-087-080		CAP,E 1-50 SMG
C826	87-A12-087-080		CAP,E 1-50 SMG
C828	87-018-127-080		CAP,TC U 470P-50 K B
CN101	87-009-551-010		CONN,15P V PH
CN402	87-A60-056-010		CONN,12P V 9604S-12C
CN651	87-049-919-010		CONN,3P V WHT EH
FB601	87-008-372-080		FILTER, EMI BL OIRNI
FB602	87-008-372-080		FILTER, EMI BL OIRNI
FB701	87-008-372-080		FILTER, EMI BL OIRNI

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
FB702	87-008-372-080		FILTER, EMI BL OIRNI
FB801	87-008-372-080		FILTER, EMI BL OIRNI
FB802	87-008-372-080		FILTER, EMI BL OIRNI
X701	87-A70-115-010		VIB,XTAL 12.288MHZ
AMP C.B			
C101	87-012-278-080		C-CAP,U 2200P-50 B
C102	87-012-278-080		C-CAP,U 2200P-50 B
C103	87-A12-087-080		CAP,E 1-50 SMG
C104	87-A12-087-080		CAP,E 1-50 SMG
C107	87-A12-095-080		CAP,E 100-50 SMG
C108	87-A12-095-080		CAP,E 100-50 SMG
C111	87-A12-078-080		CAP,E 47-35 SMG
C112	87-A12-078-080		CAP,E 47-35 SMG
C113	87-012-195-080		C-CAP,U 100P-50CH
C114	87-012-195-080		C-CAP,U 100P-50CH
C117	87-A10-596-080		C-CAP,S 100P-100 J CH
C118	87-A10-596-080		C-CAP,S 100P-100 J CH
C119	87-012-368-080		C-CAP,S 0.1-50 F
C120	87-012-368-080		C-CAP,S 0.1-50 F
C121	87-012-286-080		CAP, U 0.01-25
C122	87-012-286-080		CAP, U 0.01-25
C125	87-010-831-080		C-CAP,U,0.1-16F
C201	87-012-278-080		C-CAP,U 2200P-50 B
C202	87-A12-087-080		CAP,E 1-50 SMG
C204	87-A12-095-080		CAP,E 100-50 SMG
C206	87-A12-078-080		CAP,E 47-35 SMG
C207	87-012-195-080		C-CAP,U 100P-50CH
C209	87-A10-596-080		C-CAP,S 100P-100 J CH
C210	87-012-368-080		C-CAP,S 0.1-50 F
C211	87-012-286-080		CAP, U 0.01-25
C300	87-012-278-080		C-CAP,U 2200P-50 B
C301	87-012-282-080		CAP, U 4700P-50
C714	87-012-286-080		CAP, U 0.01-25
CN102	87-A61-109-010		CONN,7P V TID-A
CN104	87-A60-060-010		CONN,07P V 9604S-07C
R157	87-A00-258-080		RES,M/F 0.22-1W J
R158	87-A00-258-080		RES,M/F 0.22-1W J
R161	87-A00-258-080		RES,M/F 0.22-1W J
R162	87-A00-258-080		RES,M/F 0.22-1W J
R230	87-A00-258-080		RES,M/F 0.22-1W J
R231	87-A00-258-080		RES,M/F 0.22-1W J
TH101	87-A91-042-080		C-THMS,100K 55001
TH102	87-A91-042-080		C-THMS,100K 55001
TH201	87-A91-042-080		C-THMS,100K 55001
W201	8B-NCK-607-010		F-CABLE,6P 2.5 130MM
WH201	87-A90-508-010		HLDR,WIRE 2.5-6P

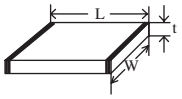
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
PT C.B			
C1	87-A10-831-010		CAP,E 1000-25 M SMG
CN1	87-A61-110-010		CONN,9P V TID-A
⚠ PT1	8B-NCK-612-010		PT BNC-19 U
⚠ PT2	8B-MA6-671-010		PT,SUB BMA U (VRK)
⚠ RY2	87-A91-418-010		RELAY,AC12V G5PA-1-M
⚠ T1	87-A60-317-010		TERMINAL, 1P MSC
⚠ T2	87-A60-317-010		TERMINAL, 1P MSC
FAN C.B			
C180	87-A12-087-080		CAP,E 1-50 SMG
C181	87-010-379-080		CAP,E 22-16 M 11L SME
C182	87-A12-071-080		CAP,E 47-25 SMG
CN181	87-009-030-010		CONN,2P V WHT PH
CN184	87-A60-688-010		CONN,4P H GRY TUC-P04X-C1
VM2 C.B			
CNA004	8B-NCK-610-010		CONN ASSY,3P BNC-K
JACK C.B			
C401	87-012-368-080		C-CAP,S 0.1-50 F
C402	87-012-368-080		C-CAP,S 0.1-50 F
C403	87-012-368-080		C-CAP,S 0.1-50 F
C404	87-012-368-080		C-CAP,S 0.1-50 F
C411	87-012-368-080		C-CAP,S 0.1-50 F
C412	87-012-368-080		C-CAP,S 0.1-50 F
J201	87-A61-540-010		JACK,PIN 4P ORBW MSP-244V -41
L401	87-A50-610-010		COIL,1UH K(MDEC)
L402	87-A50-610-010		COIL,1UH K(MDEC)
L411	87-A50-610-010		COIL,1UH K(MDEC)
WH401	87-A90-508-010		HLDR,WIRE 2.5-6P
DET C.B			
DECK C.B			
CN1	87-099-753-010		CONN,11P H 9604
CNA351	86-ZM3-605-110		CONN ASSY,8P-RPB
SFR1	87-024-581-010		SFR,3.3K H KVSF637A
SOL1	82-ZM3-627-010		SOL ASSY,27 SO
SOL2	82-ZM3-627-010		SOL ASSY,27 SO
SW1	87-A90-673-010		SW,MICRO ESE11SH1C
SW2	87-A90-673-010		SW,MICRO ESE11SH1C
SW3	87-A90-673-010		SW,MICRO ESE11SH1C
SW4	87-A90-673-010		SW,MICRO ESE11SH1C
SW5	87-A90-673-010		SW,MICRO ESE11SH1C

Oチップ抵抗部品コード／CHIP RESISTOR PART CODE

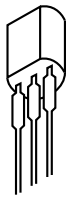
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION

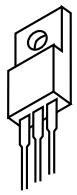


E C B

CDA1585BC
KTA1266GR
KTC3198GR

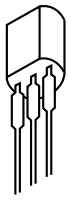
E C B

2SA1980G
2SA1981Y
CC5551



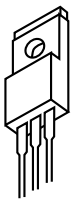
B C E

CSB1370EF



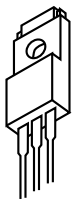
E C B

CSC4115BC



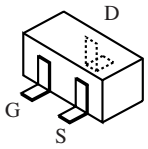
B C E

2SB1342
2SB1686
2SD1933
2SD2642

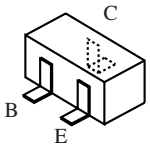


G D S

2SK2937

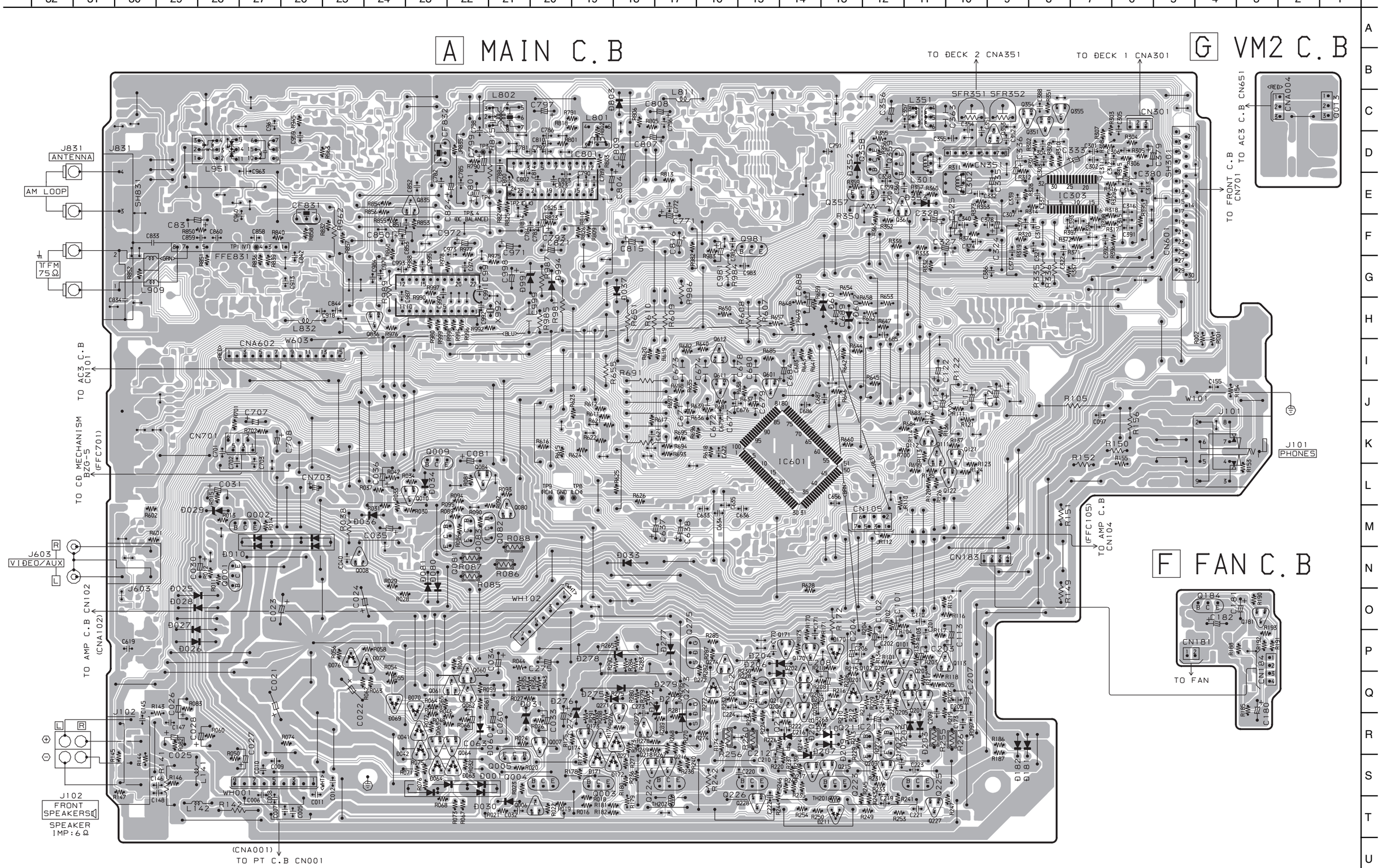


2SK2158

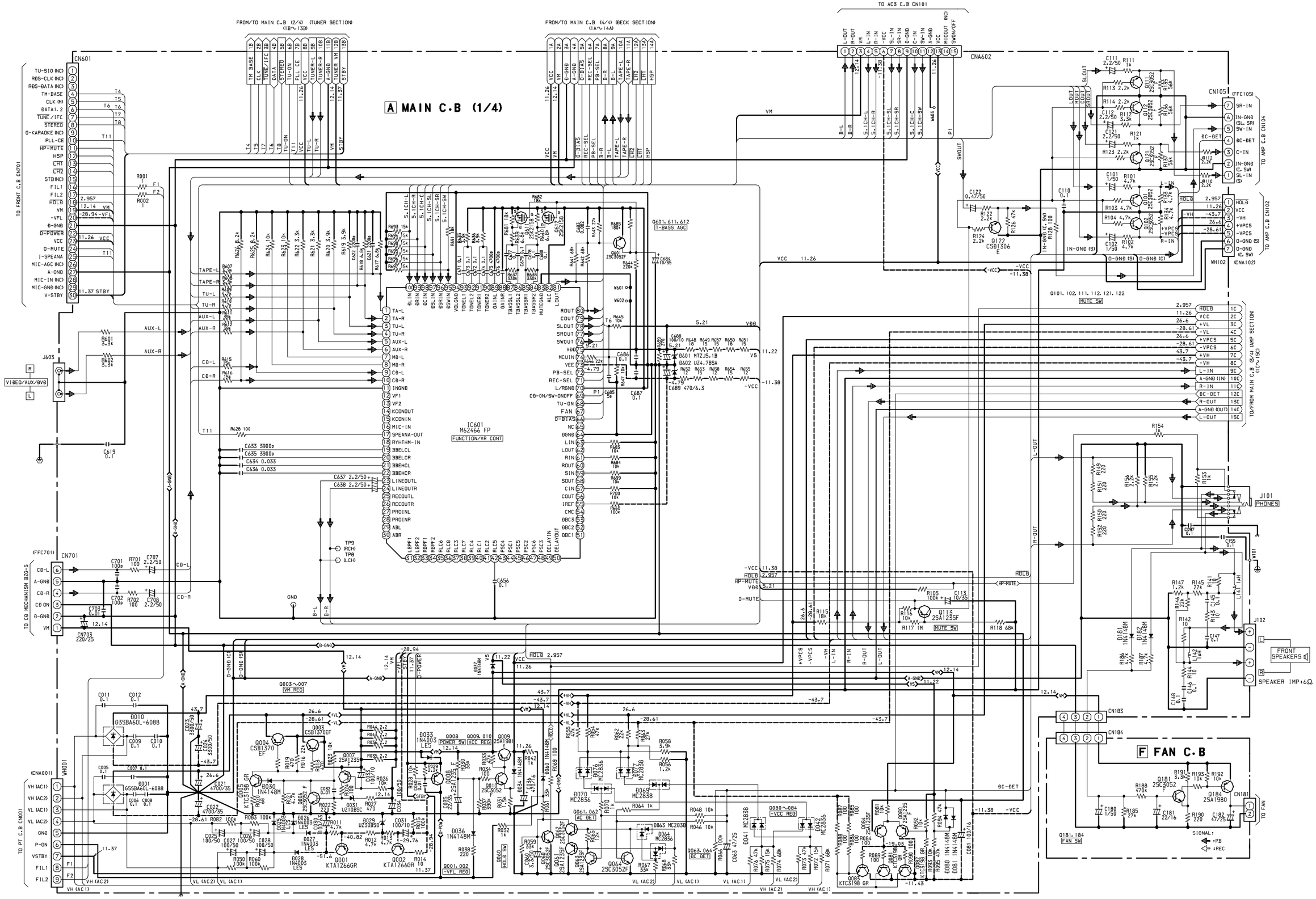


2SA1235F
2SC2714O
2SC3052F
CMBT5401
CMBT5551
CSD1306E

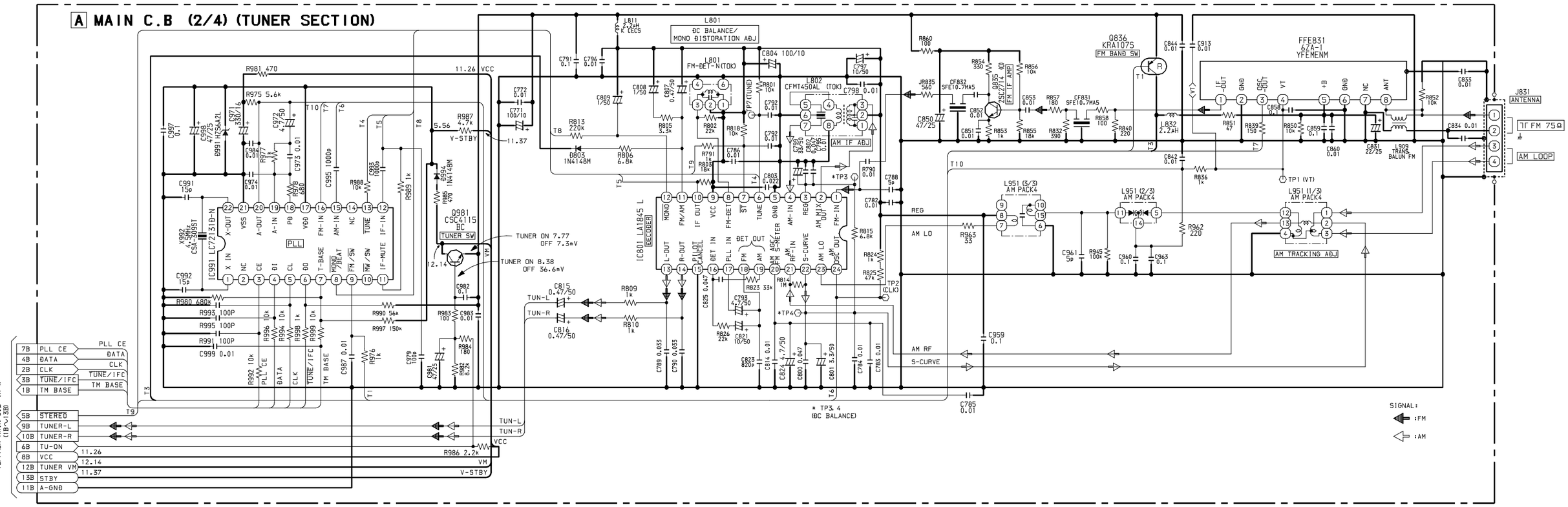
DTC114YKA
KRA102S
KRA107S
KRC102S-RTK
RT1P141C
RT1P441C


A MAIN C.B
G VM2 C.B
F FAN C.B
TO DECK 2 CNA351
TO DECK 1 CNA301
TO FRONT C.B CN701
TO AC3 C.B CN651
J831 ANTENNA
AM LOOP
TFM 75Ω
TO CD MECHANISM BZG-5 (FFC701)
TO AC3 C.B CN101
J603 VIDEO/AUX
TO AMP C.B CN102 (CNA102)
J102 FRONT SPEAKERS
SPEAKER IMP:6Ω
(CNA001) TO PT C.B CN001
TO AMP C.B CN104 (FFC105)
TO FAN
J101 PHONES
IC601
IC303
CN601
CN701
CN703
CN105
CN183
CN181
CN301
CN351
CNA004
CNA602
SFR351 SFR352

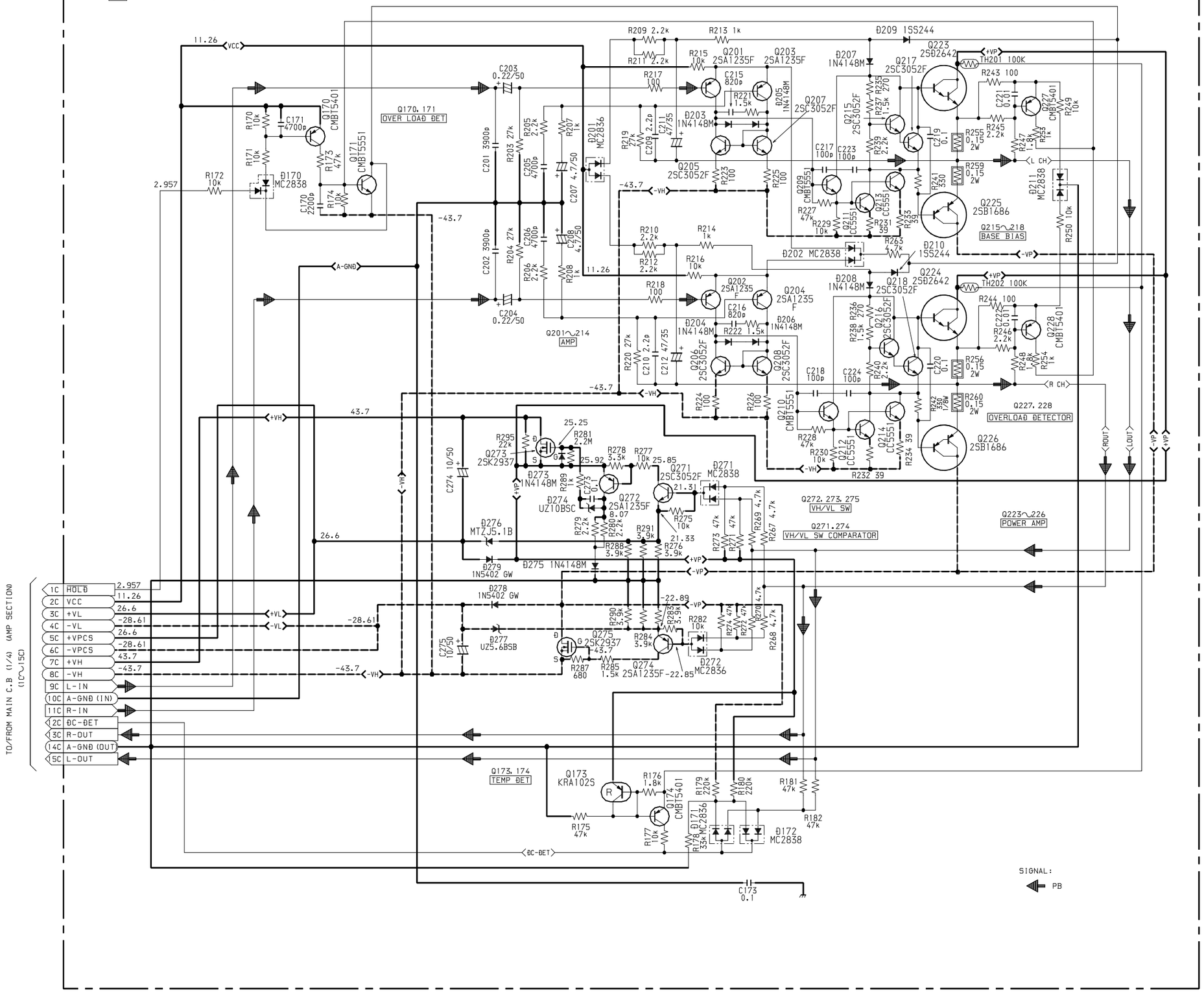
SCHEMATIC DIAGRAM – 1 (MAIN 1 / 4 / FAN)

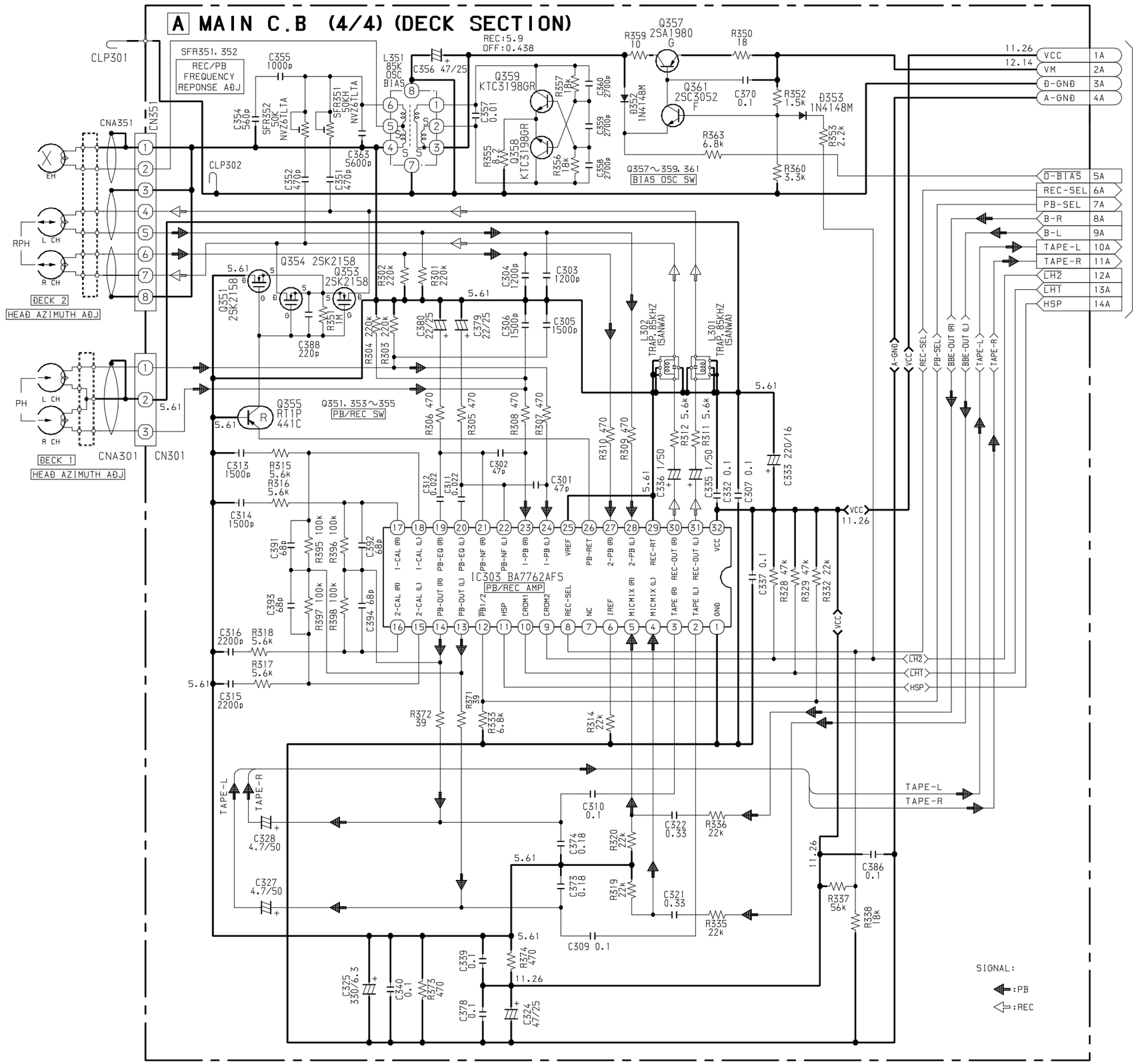


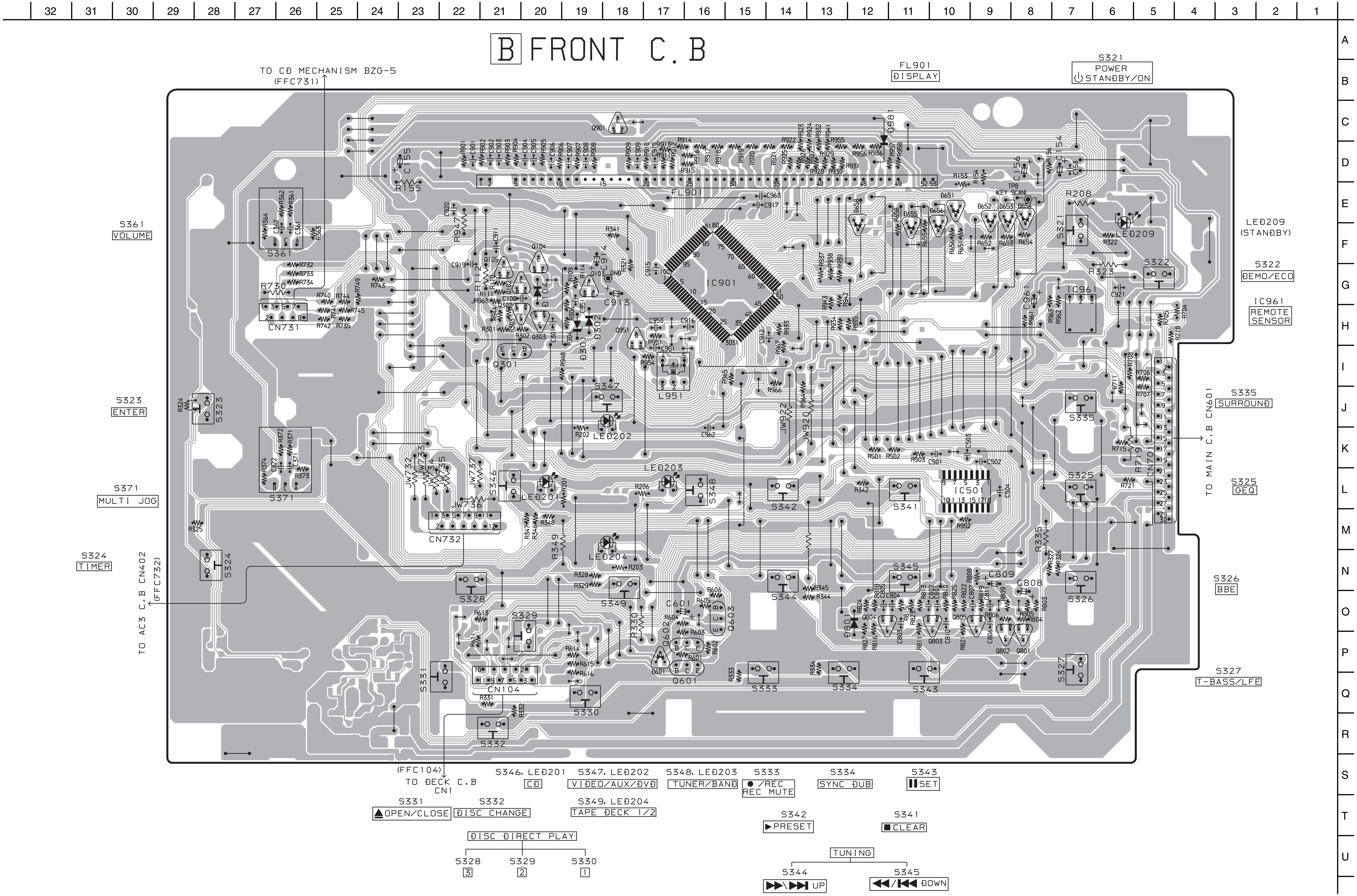
SCHEMATIC DIAGRAM – 2 (MAIN 2/4 : TUNER)



A MAIN C.B (3/4) (AMP SECTION)

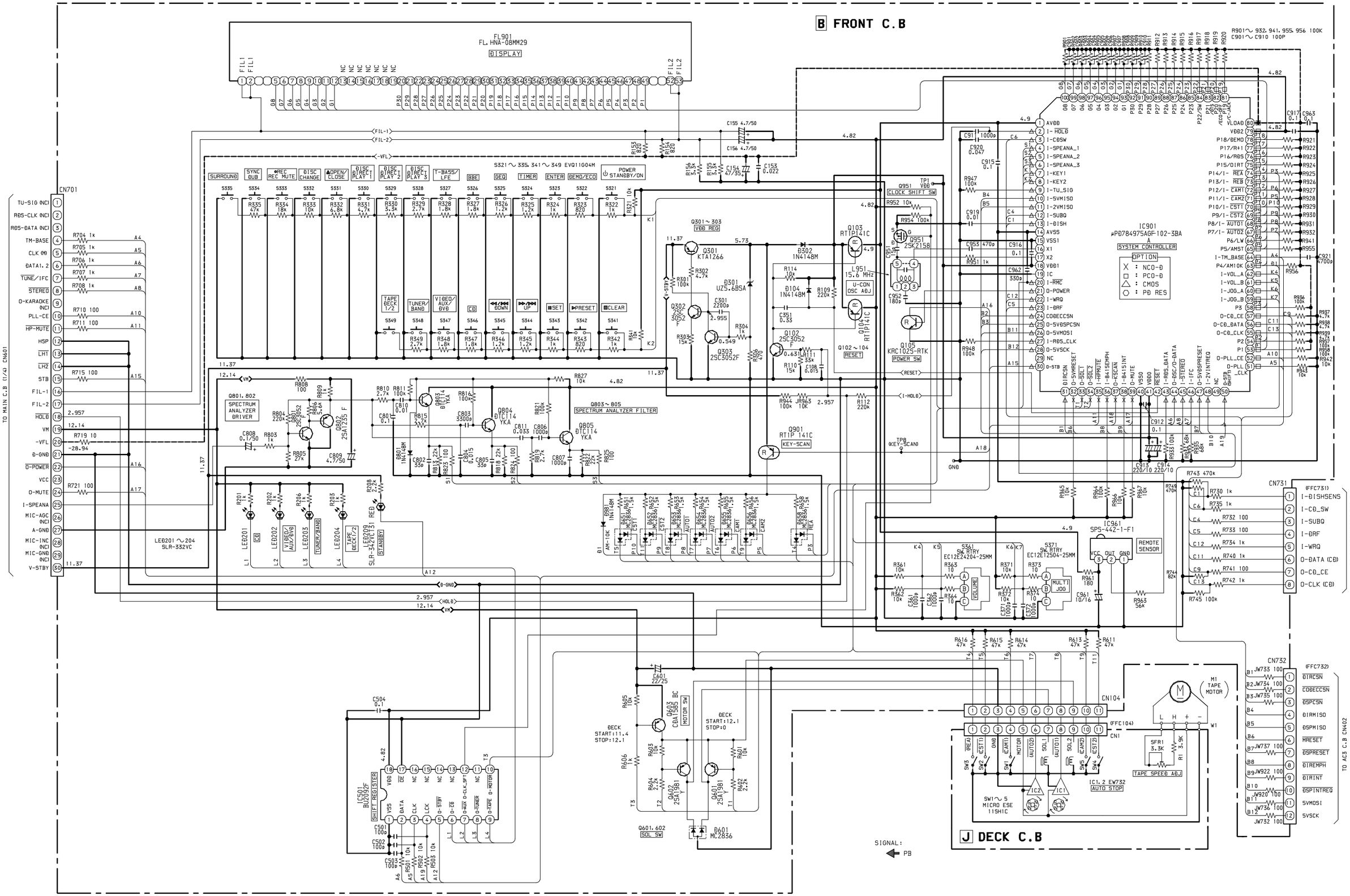


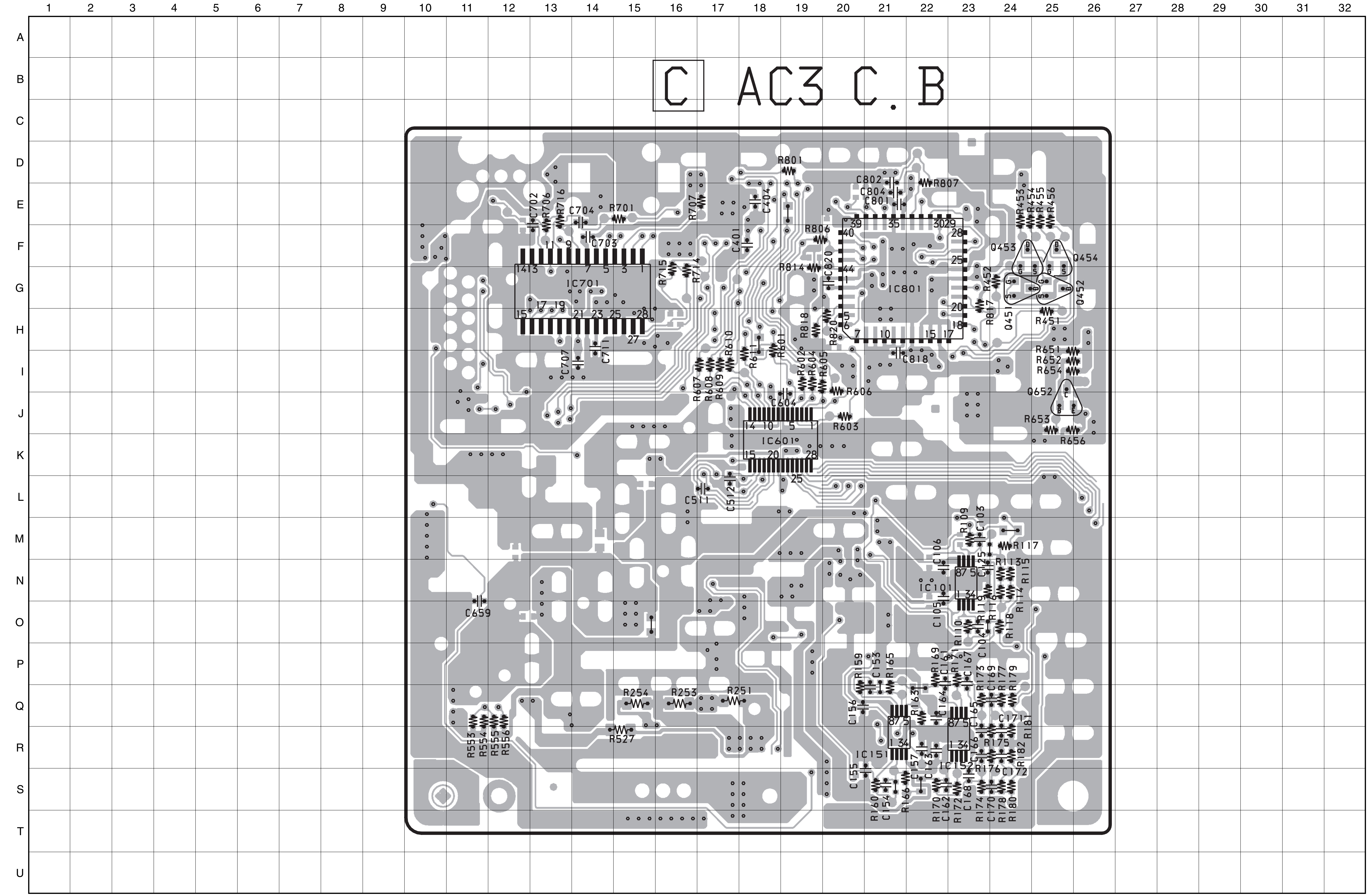

A MAIN C.B (4/4) (DECK SECTION)
REC:5.9
OFF:0.438
SFR351, 352
REC/PB FREQUENCY REPONSE ADJ
CLP301
CLP302
CN351
CNA351
CN301
CNA301
DECK 2
HEAD AZIMUTH ADJ
DECK 1
HEAD AZIMUTH ADJ
Q357 2SA1980
Q359 KTC3198GR
Q358 KTC3198GR
Q361 2SC3052
Q354 2SK2158
Q353 2SK2158
Q351 2SK2158
Q355 RT1P 441C
Q351, 353~355 PB/REC SW
Q357~359, 361 BIAS OSC SW
L351 85K OSC BIAS
L302 TRAP, 85KHZ (SANWA)
L301 TRAP, 85KHZ (SANWA)
IC303 BA7762AFS
PB/REC AMP
1-CAL (R)
1-CAL (L)
PB-EQ (R)
PB-EQ (L)
PB-NF (R)
PB-NF (L)
1-PB (R)
1-PB (L)
VREF
PB-RET
2-PB (R)
2-PB (L)
REC-RT
REC-OUT (R)
REC-OUT (L)
VCC
2-CAL (R)
2-CAL (L)
PB-OUT (R)
PB-OUT (L)
PB1/2
HSP
CROM1
CROM2
REC-SEL
NC
IREF
MICMIX (R)
MICMIX (L)
TAPE (R)
TAPE (L)
GND
VCC
VM
Ð-GNÐ
A-GNÐ
O-BIAS
REC-SEL
PB-SEL
B-R
B-L
TAPE-L
TAPE-R
LH2
LHT
HSP
TO/FORM MAIN C.B (1/4) (1A~14A)
SIGNAL:
:PB
:REC



B FRONT C.B
TO CD MECHANISM BZG-5 (FFC731)
FL901 DISPLAY
S321 POWER STANDBY/ON
S361 VOLUME
LED209 (STANDBY)
S322 DEMO/ECO
IC961 REMOTE SENSOR
S323 ENTER
S335 SURROUND
TO MAIN C.B CN601
S371 MULTI JOG
S325 GEQ
S324 TIMER
TO AC3 C.B CN402 (FFC732)
S326 BBE
S327 T-BASS/LFE
(FFC104) TO DECK C.B CN1
S346, LED201 CD
S347, LED202 VIDEO/AUX/DVD
S348, LED203 TUNER/BAND
S333 ● /REC REC MUTE
S334 SYNC DUB
S343 ❚❚SET
S331 ▲OPEN/CLOSE
S332 DISC CHANGE
S349, LED204 TAPE DECK 1/2
S342 ▶PRESET
S341 ■CLEAR
DISC DIRECT PLAY
S328 3
S329 2
S330 1
TUNING
S344 ▶▶\▶▶❚ UP
S345 ◀◀/❚◀◀ DOWN

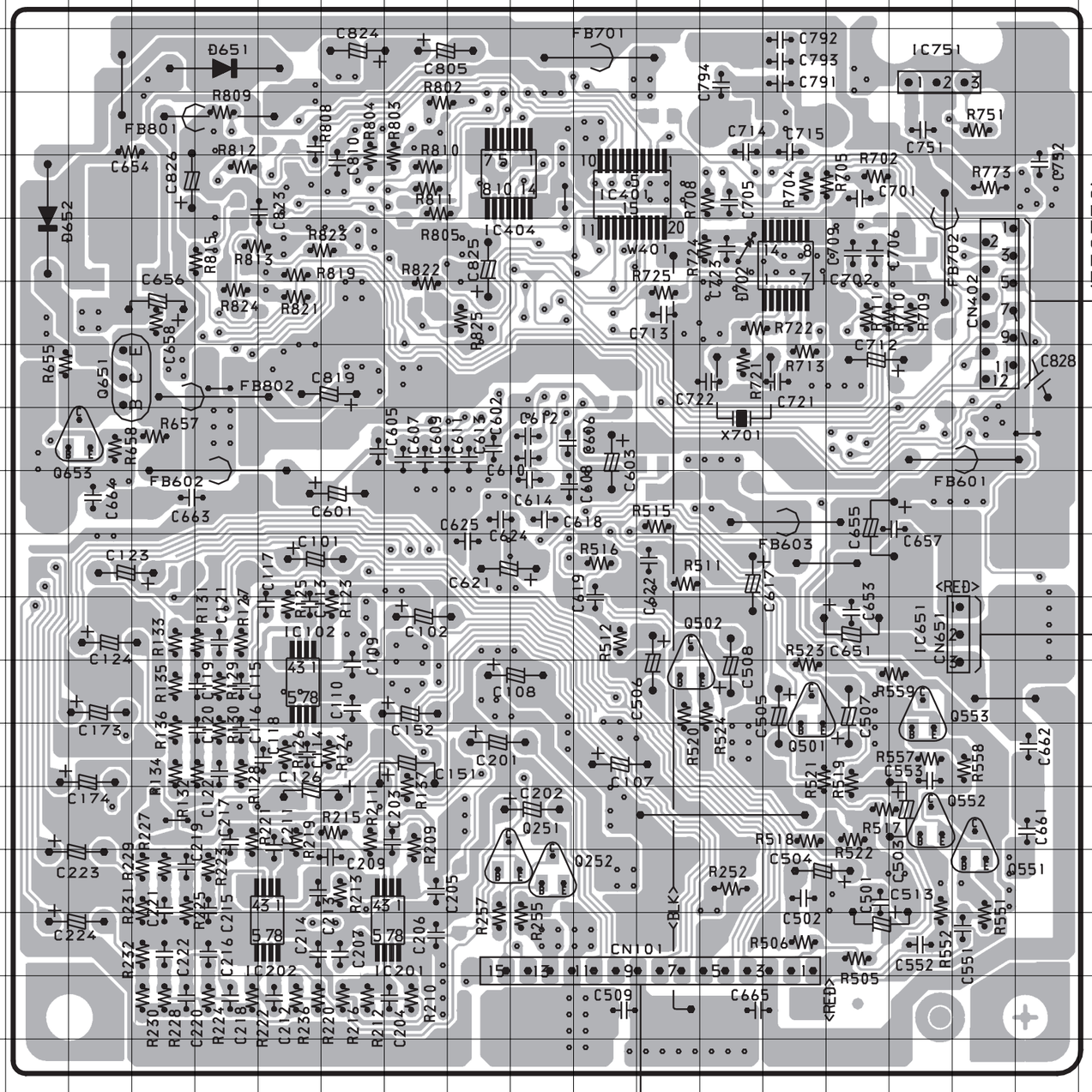
SCHEMATIC DIAGRAM – 5 (FRONT / DECK)



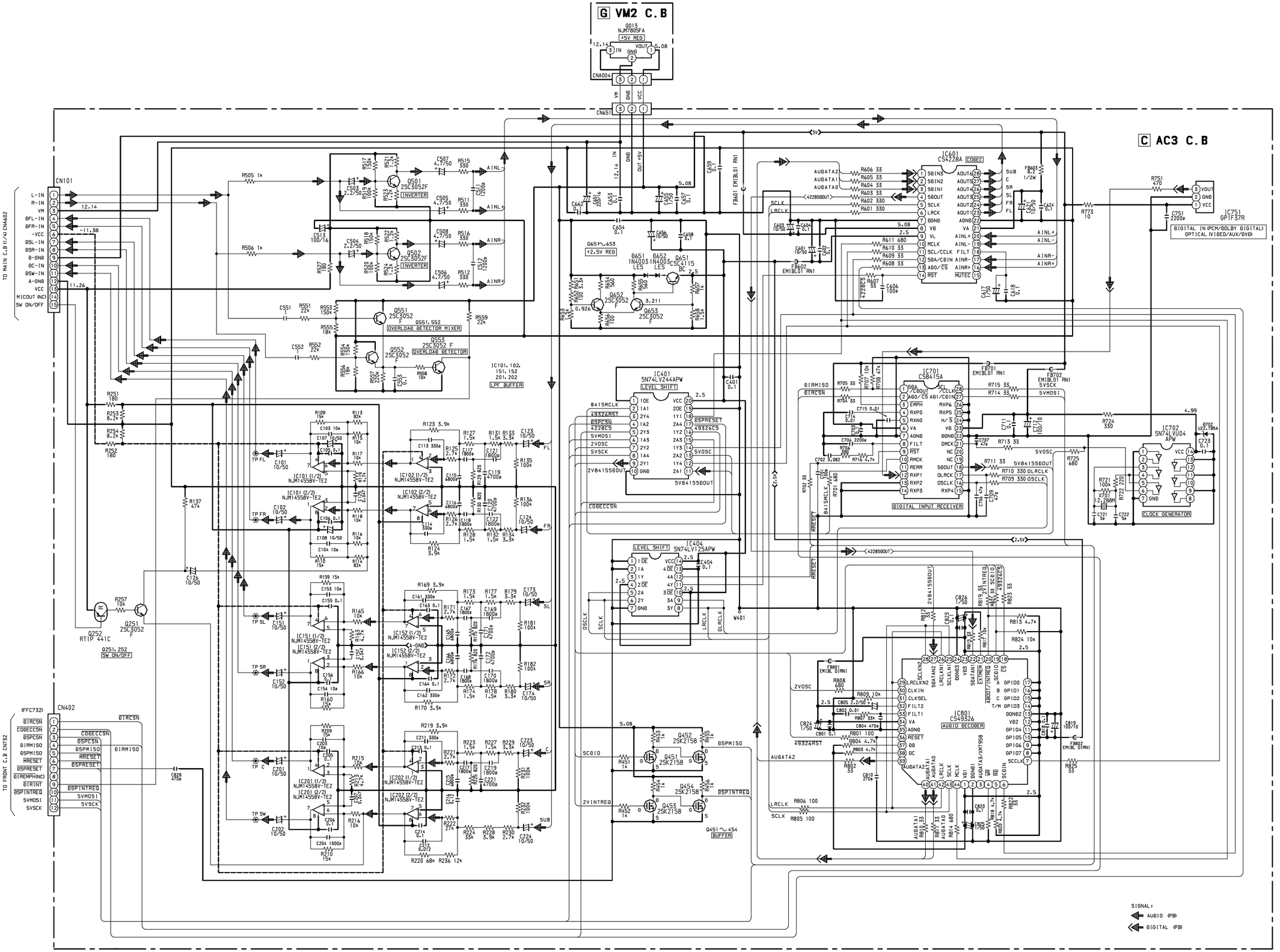

C AC3 C.B
IC701
IC801
IC601
IC101
IC151
IC152

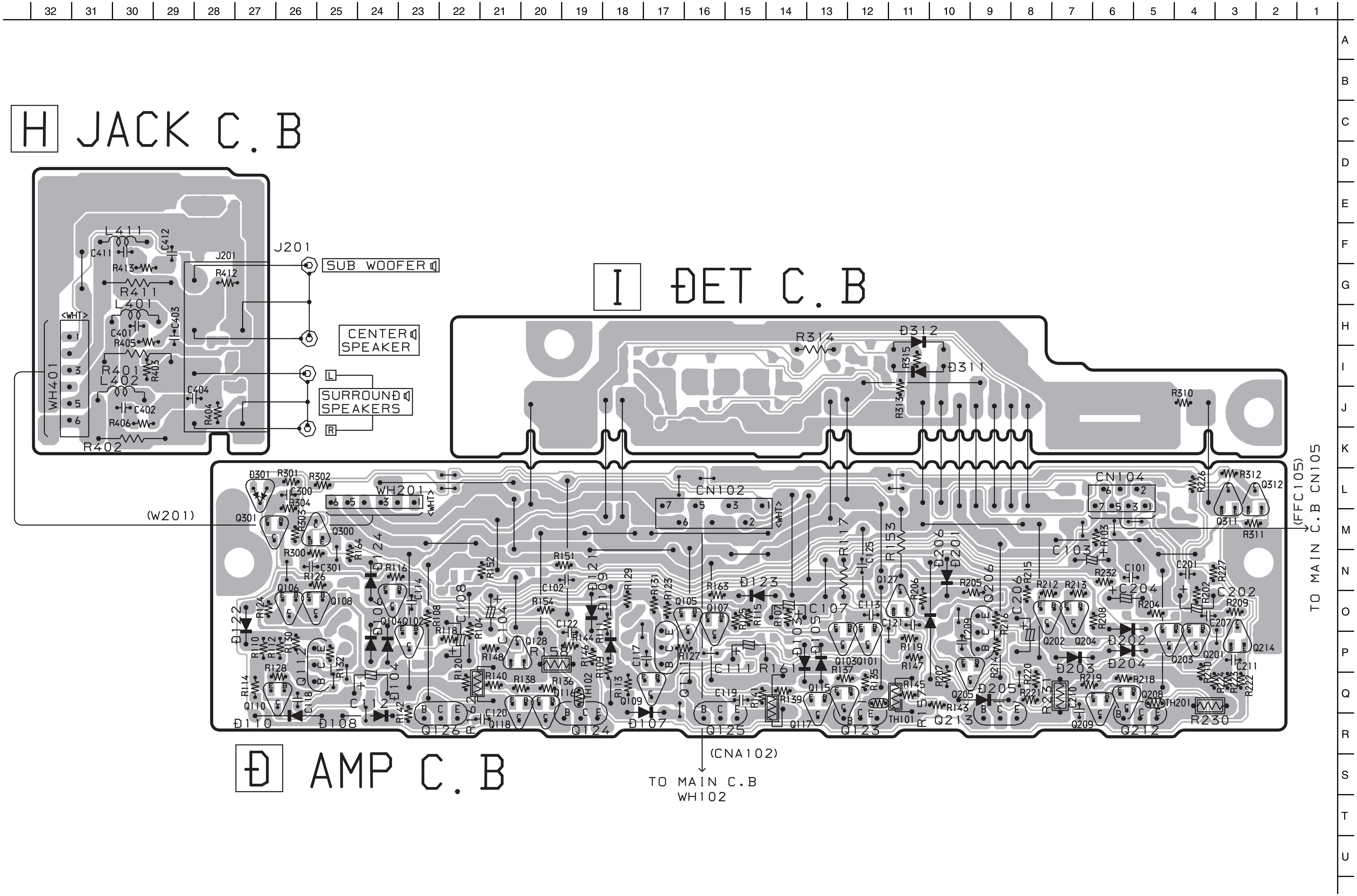
C AC3 C.B

IC751
ĐIGITAL IN (PCM/ĐOLBY ĐIGITAL)
OPTICAL (VIĐEO/AUX/ĐVĐ)



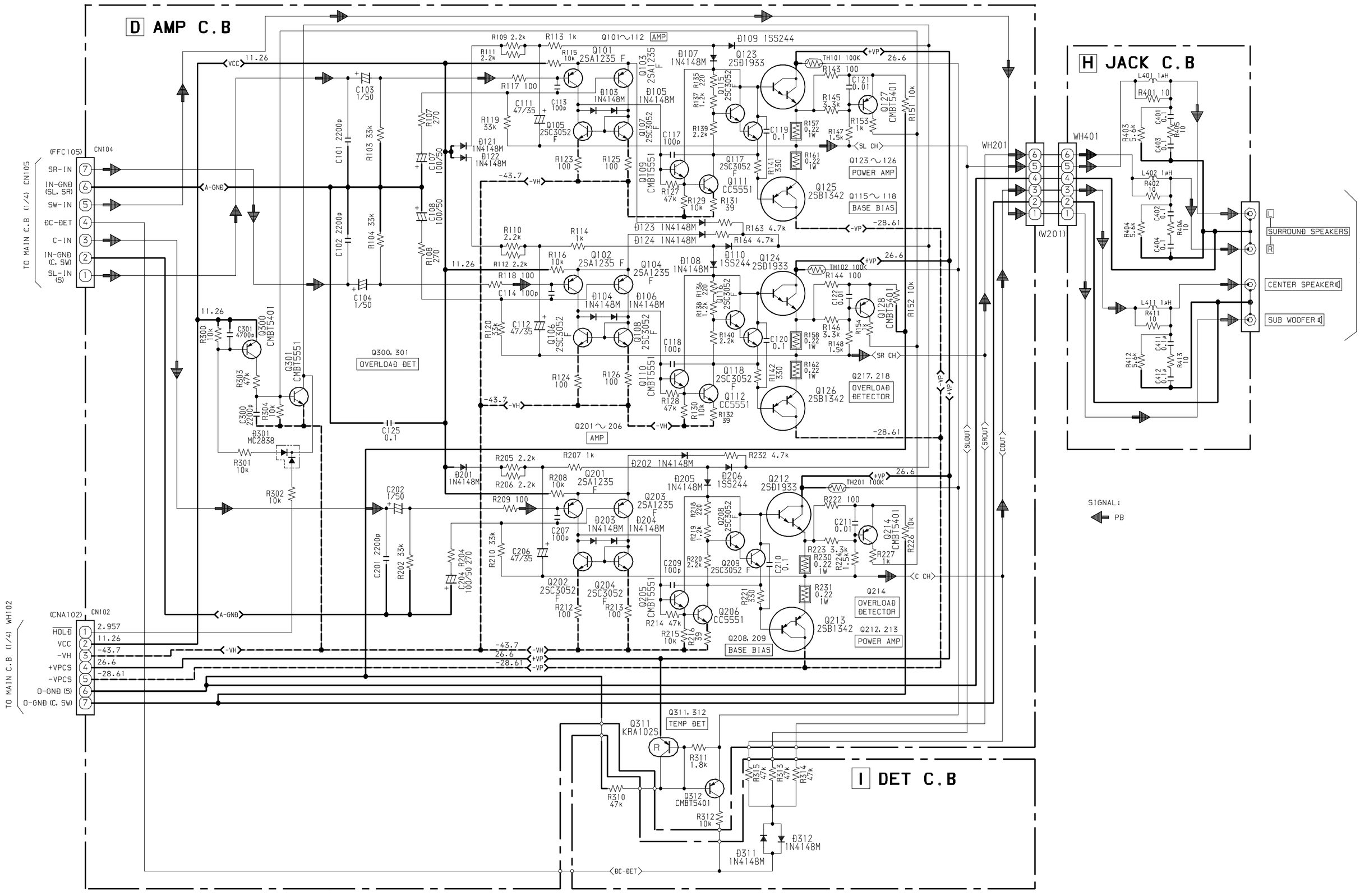
SCHEMATIC DIAGRAM – 6 (AC3 / VM2)



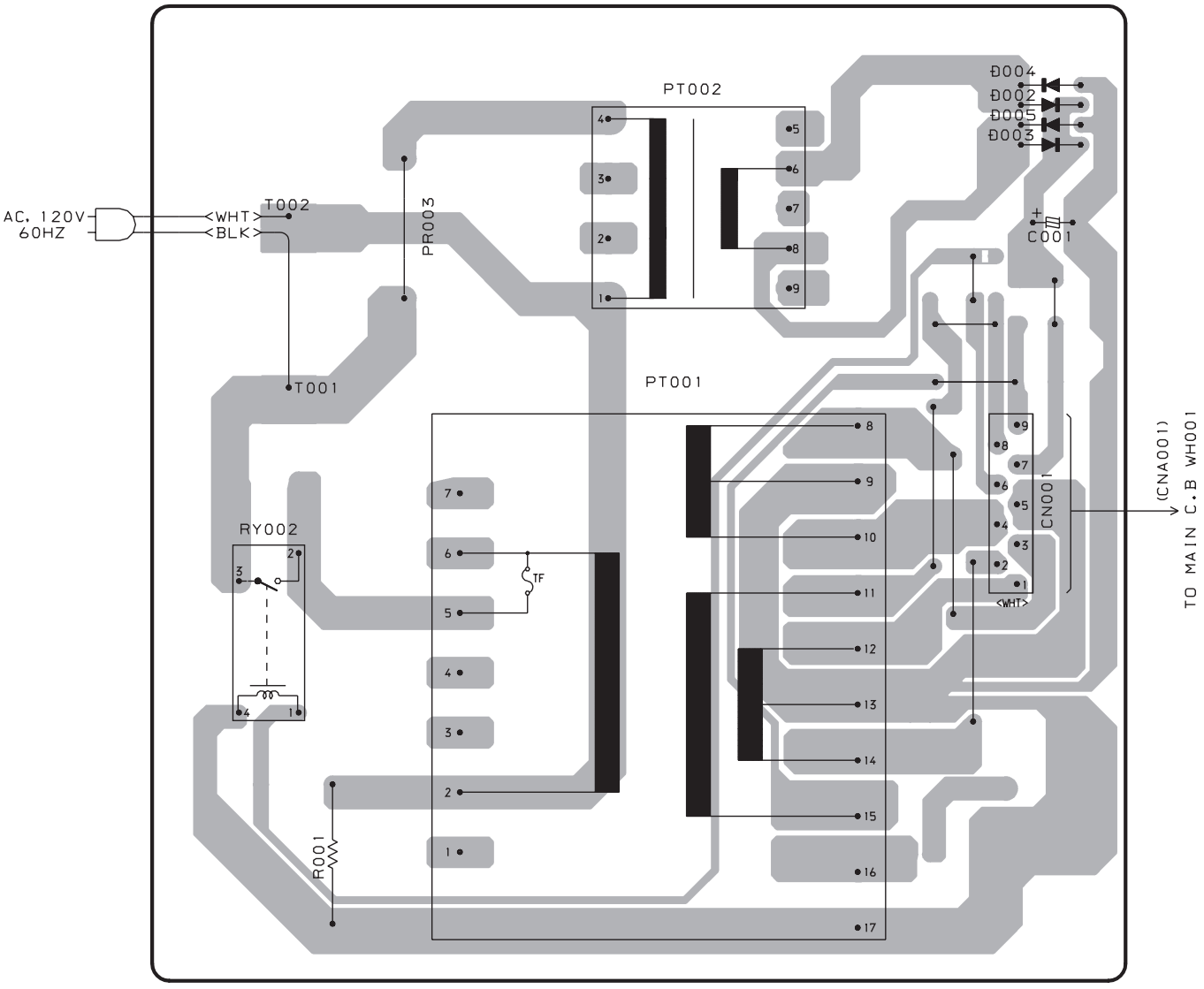


H JACK C.B
I DET C.B
Đ AMP C.B
J201
SUB WOOFER
CENTER SPEAKER
SURROUNDĐ SPEAKERS
L
R
WH401
<WHT>
(W201)
WH201
CN102
CN104
TO MAIN C.B CN105
(FFC105)
(CNA102)
TO MAIN C.B
WH102

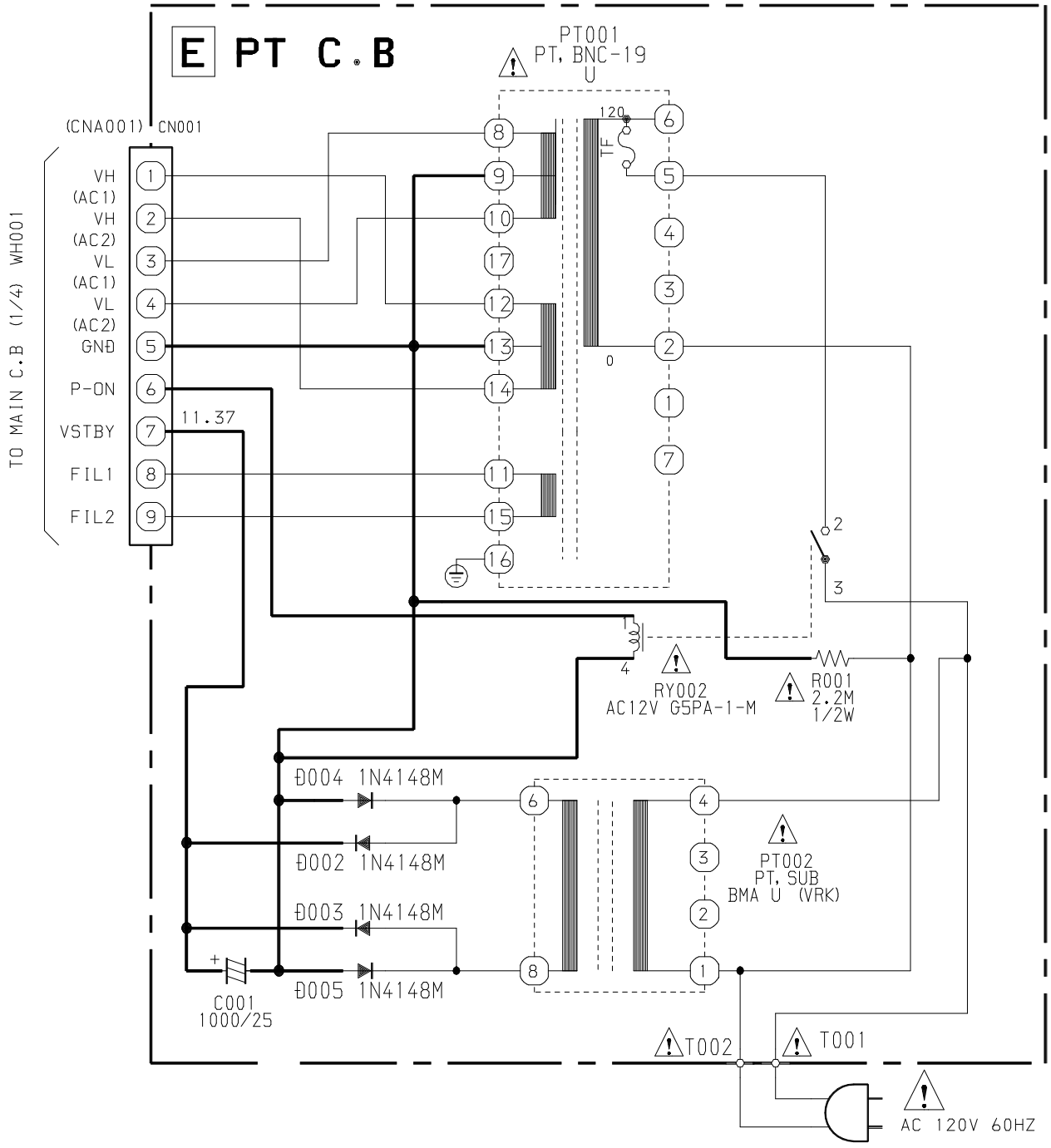
SCHEMATIC DIAGRAM – 7 (AMP / JACK / DET)



E PT C.B


AC. 120V
60HZ
<WHT>
<BLK>
T002
T001
PR003
PT002
PT001
Đ004
Đ002
Đ005
Đ003
C001
CN001
<WHT>
(CNA001)
TO MAIN C.B WH001
RY002
TF
R001

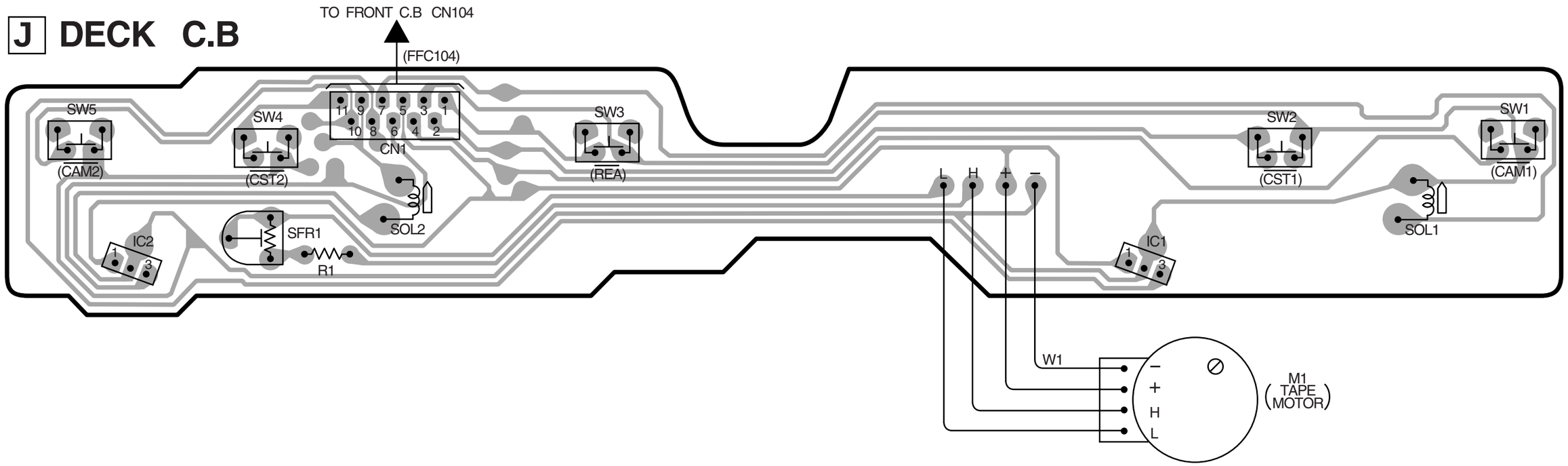
SCHEMATIC DIAGRAM – 8 (PT)

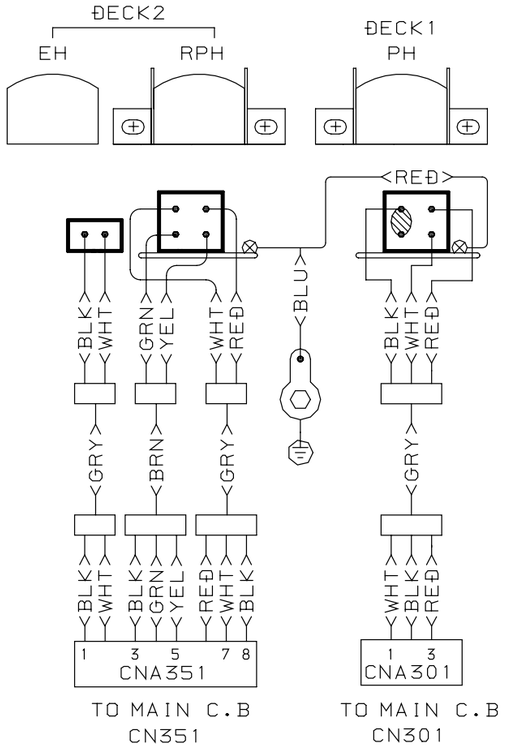


32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

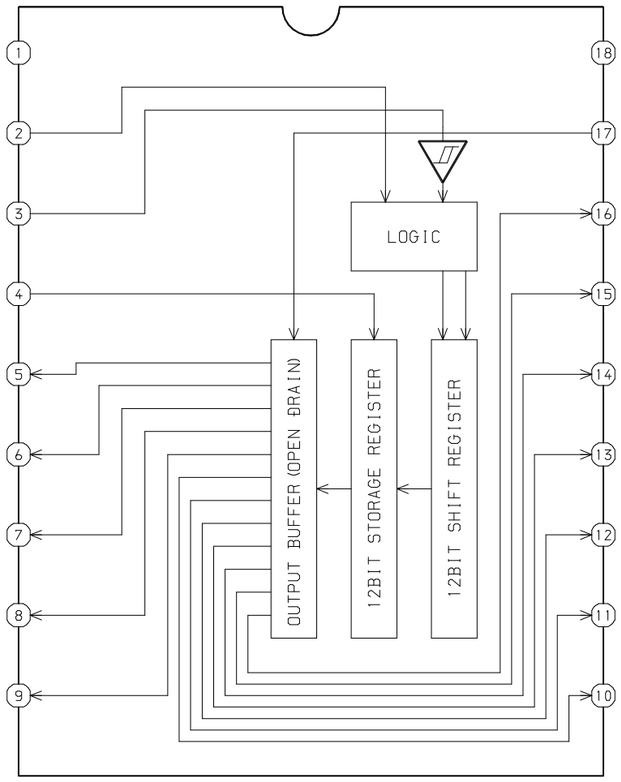
J DECK C.B



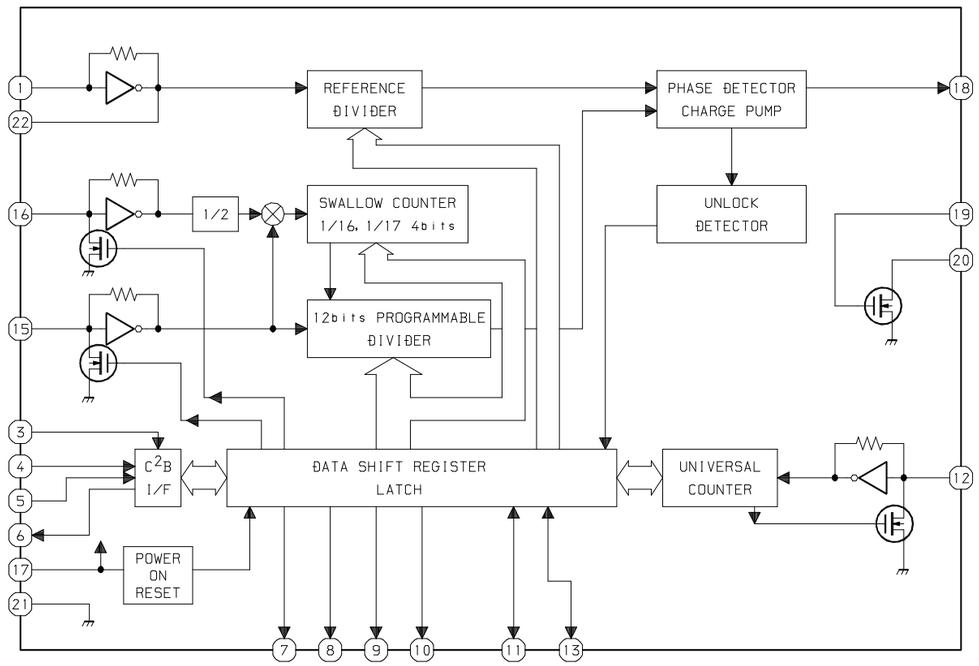


IC BLOCK DIAGRAM

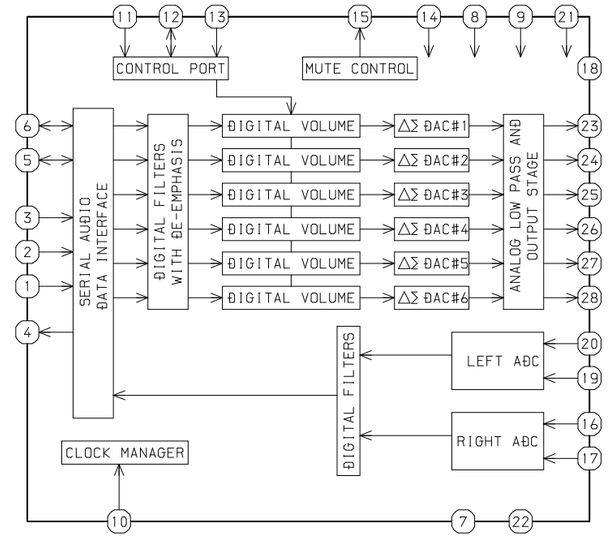
IC, BU2092F



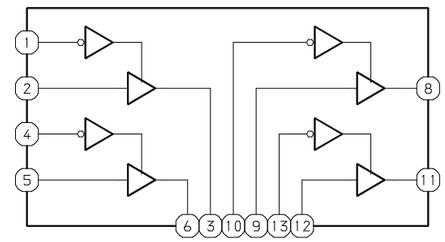
IC, LC72131Đ-N



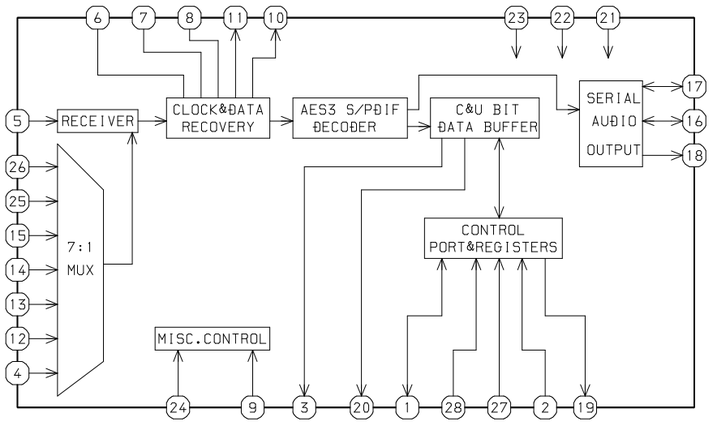
IC, CS4228A



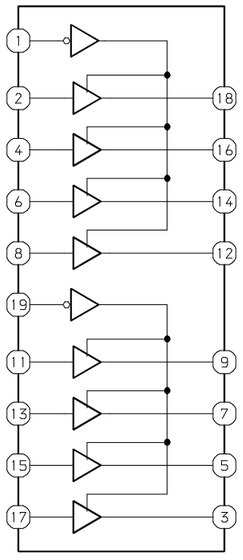
IC, SN74LV125APW



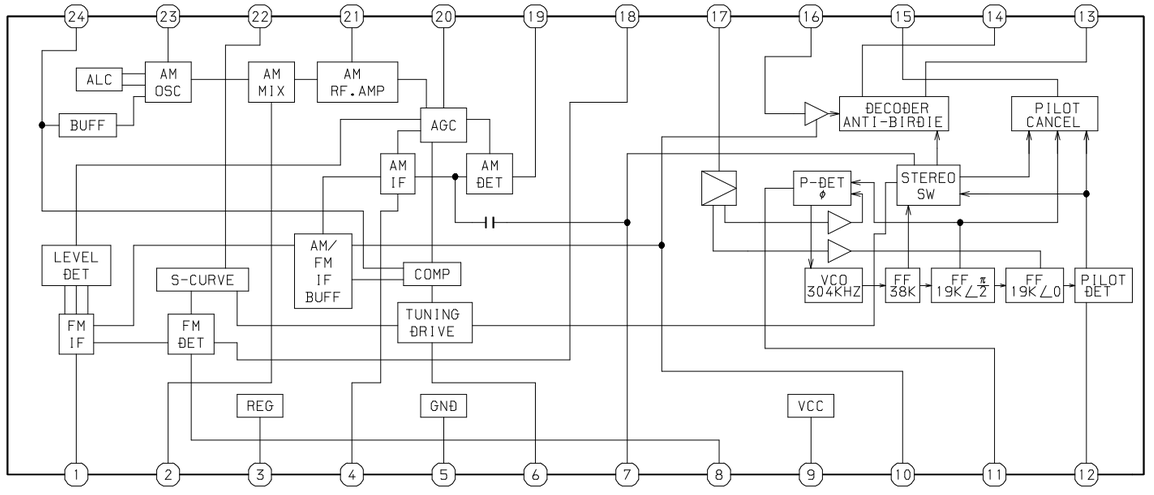
IC, CS8415A



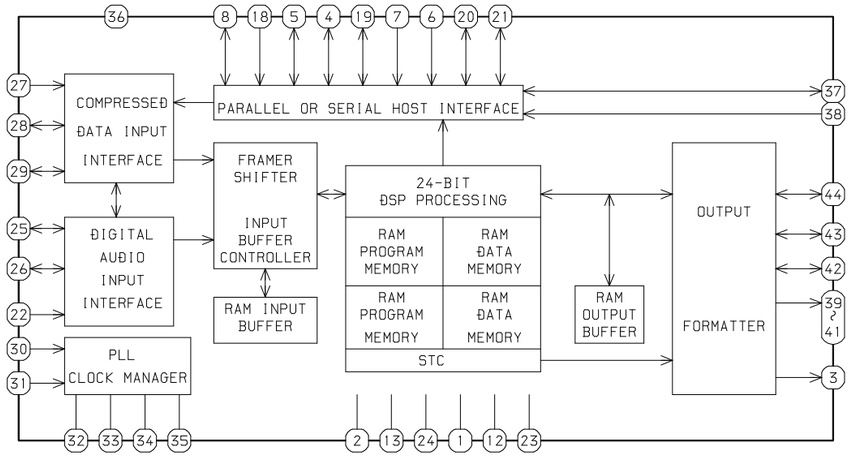
IC, SN74LV244APW



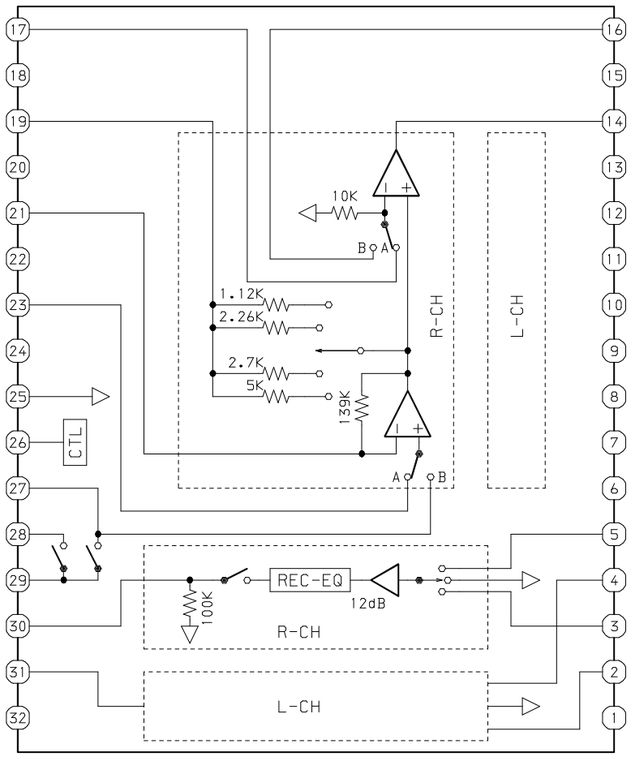
IC, LA1845L



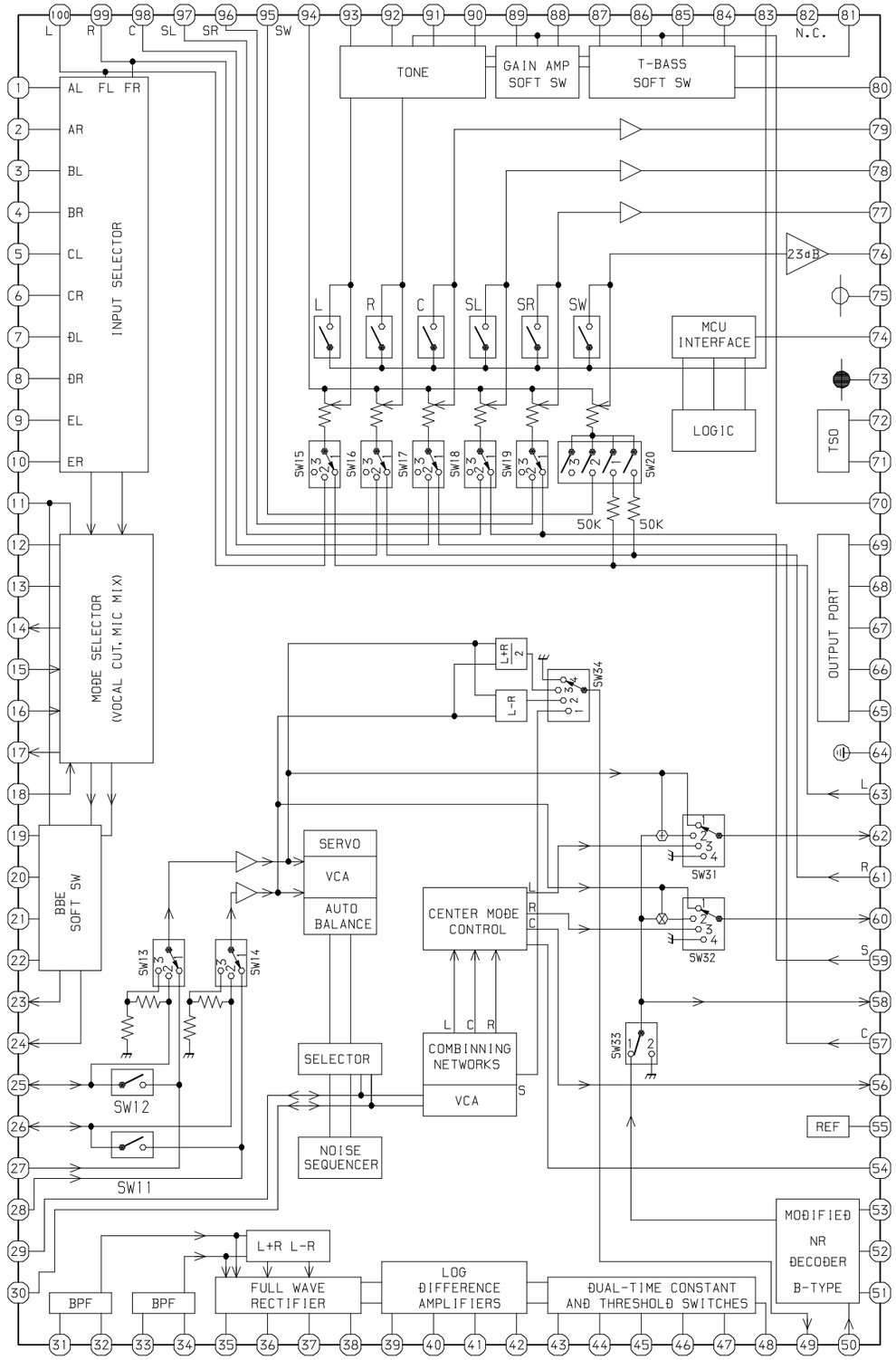
IC, CS49326



IC, BA7762AFS

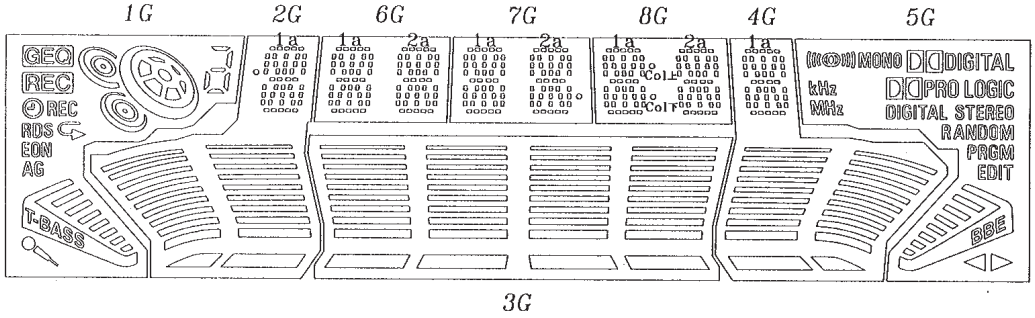


IC, M62466FP

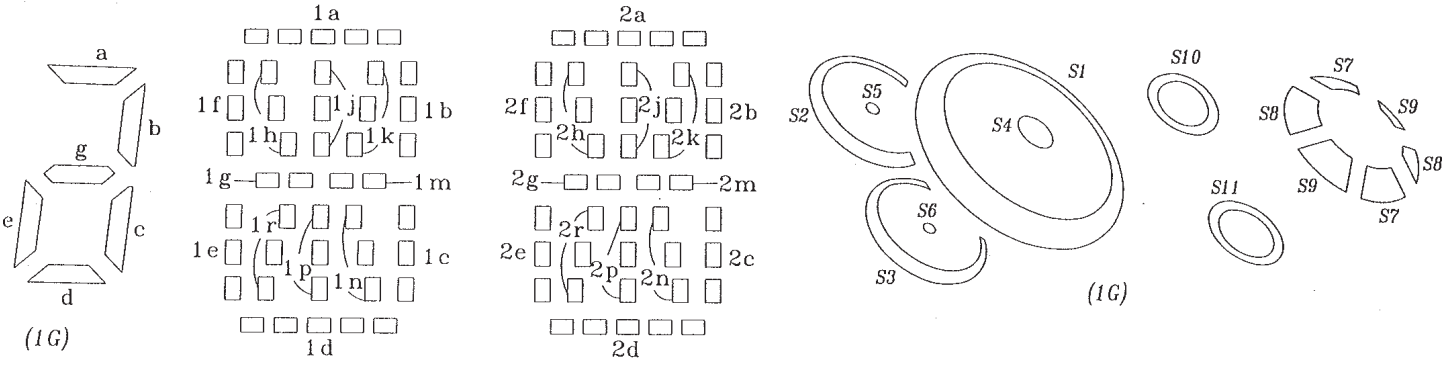


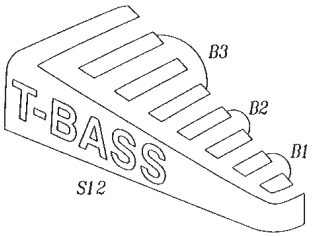
FL (HNA-08MM29) GRID ASSIGNMENT AND ANODE CONNECTION

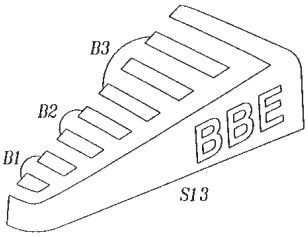
GRID ASSIGNMENT

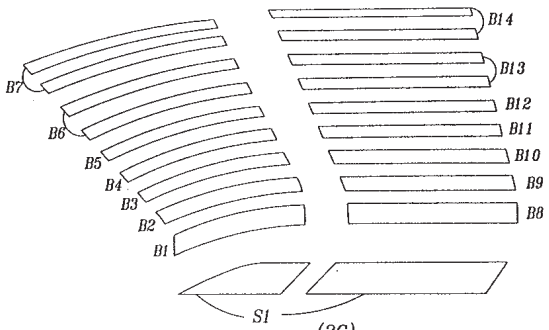


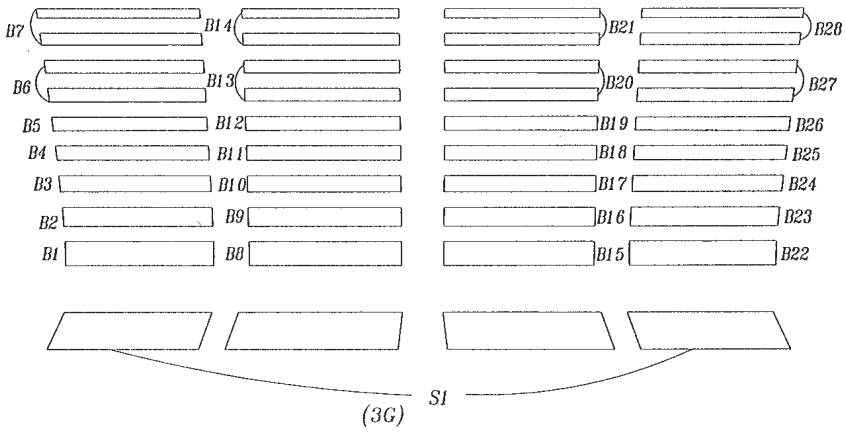
3G

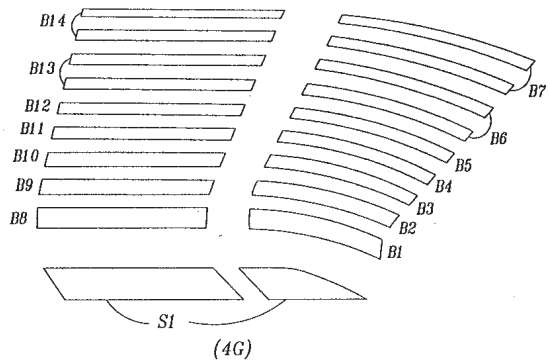












ANODE CONNECTION

	1G	2G	3G	4G	5G	6G	7G	8G
P1		B1	B1	B1	—	1a	1a	1a
P2	S12	B2	B2	B2	S13	1h	1h	1h
P3	B1	B3	B3	B3	B1	1j	1j	1j
P4	B2	B4	B4	B4	B2	1k	1k	1k
P5	B3	B5	B5	B5	B3	1b	1b	1b
P6	AG	B6	B6	B6	EDIT	1f	1f	1f
P7	EON	B7	B7	B7	PRGM	1m	1m	1m
P8	RDS	B8	B8	B8	RANDOM	1g	1g	1g
P9		B9	B9	B9	STEREO	1c	1c	1c
P10	REC	B10	B10	B10	DIGITAL	1e	1e	1e
P11	REC	B11	B11	B11	DPRO LOGIC	1r	1r	1r
P12	GEQ	B12	B12	B12		1p	1p	1p
P13	S1	B13	B13	B13	DDIGITAL	1n	1n	1n
P14	S2	B14	B14	B14	MONO	1d	1d	1d
P15	S3	S1	B15	S1		2a	2a	2a
P16	S4	1a	B16	1a	MHz	2h	2h	2h
P17	S5	1h	B17	1h	kHz	2j	2j	2j
P18	S6	1j	B18	1j	◁	2k	2k	2k
P19	S7	1k	B19	1k	▷	2b	2b	2b
P20	S8	1b	B20	1b	—	2f	2f	2f
P21	S9	1f	B21	1f	—	2m	2m	2m
P22	S10	1m	B22	1m	—	2g	2g	2g
P23	S11	1g	B23	1g	—	2c	2c	2c
P24	a,g,d	1c	B24	1c	—	2e	2e	2e
P25	b	1e	B25	1e	—	2r	2r	2r
P26	c	1r	B26	1r	—	2p	2p	2p
P27	e	1p	B27	1p	—	2n	2n	2n
P28		1n	B28	1n	—	2d	2d	2d
P29	—	1d	S1	1d	—	—	○	Col(UP)
P30	—	○	—	—	—	—	—	Col(DOWN)

IC DESCRIPTION

IC, µPD784975AGF-102-3BA

Pin No.	Pin Name	I/O	Description
1	AVDD	–	Power supply.
2	I-$\overline{\text{HOLD}}$	I	Power failure detected input.
3	I-CDSW	I	CD mecha switch A/D converter input.
4	I-SPEANA_1	I	A/D input for spectrum analyser level display.
5	I-SPEANA_2	I	A/D input for spectrum analyser level display.
6	I-SPEANA_3	I	A/D input for spectrum analyser level display.
7	I-KEY1	I	Key A/D input 1.
8	I-KEY2	I	Key A/D input 2.
9	I-TU_SIG	I	Tuner signal input. (Not used)
10	I-5VMISO	I	IC, CS8415A data input.
11	I-2VMISO	I	IC, CS49326 data input.
12	I-SUBQ	I	CD SUBQ data input.
13	I-DISH	I	CD turntable photo sensor input A/D converter input.
14	AVSS	–	GND.
15	VSS1	–	GND.
16	X1	–	15.6MHz oscillator circuit.
17	X2	–	15.6MHz oscillator circuit.
18	VDD1	–	Power supply.
19	IC	–	Internal connection (connected to GND).
20	I-$\overline{\text{RMC}}$	I	System remote control signal input.
21	O-POWER	O	System power supply ON/$\overline{\text{OFF}}$ output.
22	I-WRQ	I	CD interrupt signal input.
23	I-DRF	I	CD focus ON detect data input.
24	CODECCSN	O	IC, CS4228A chip select output.
25	O-5VDSPCSN	O	IC, CS49326 chip select output.
26	O-5VMOSI	O	IC, CS8415A, IC, CS4228A, IC, CS49326 data output.
27	I-RDS_CLK	I	Tuner RDS clock input. (Not used)
28	O-5VSCK	O	IC, CS8415A, IC, CS4228A, IC, CS49326 serial clock output.
29	NC	-	Not connected.
30	O-STB	O	MAIN PWB strobe output.
31	DIRCSN	O	IC, CS8415A chip select output.
32	O-5VMRESET	O	IC, CS8415A, IC, CS4228A reset output.
33	O-$\overline{\text{SOL1}}$	O	DECK1 solenoid $\overline{\text{ON}}$/OFF output.
34	O-$\overline{\text{SOL2}}$	O	DECK2 solenoid $\overline{\text{ON}}$/OFF output.
35	I-$\overline{\text{HPMUTE}}$	I	Headphone MUTE input.
36	I-8415EMPH	I	Not used.
37	O-$\overline{\text{KSCAN}}$	O	Switch SCAN timing output.
38	I-8415INT	I	IC, CS8415A INT input.
39	O-MUTE	O	System MUTE ON/$\overline{\text{OFF}}$ output.
40	VSS0	–	GND.
41	VDD0	–	Power supply.
42	$\overline{\text{RESET}}$	–	System reset input ($\overline{\text{ON}}$/OFF).
43	I-RDS_DATA	I	Tuner RDS data input. (Not used)

Pin No.	Pin Name	I/O	Description
44	O-DSC/O-DATA	O	Function IC / Tuner IC, data output.
45	I-$\overline{\text{STEREO}}$	I	Tuner STEREO detect input.
46	I-IFC	I	Tune IF count serial data input.
47	O-5VDSPRESET	O	IC, CS49326 reset output.
48	I-2VINTREQ	I	IC, CS49326 INT input.
49	NC	–	Not connected.
50	O-STB(SHIFT)	O	Shift register strobe output.
51	O-PLL_CLK	O	PLL IC clock enable output.
52	O-PLL_CE	O	PLL IC chip enable output.
53, 54	P1, P2	O	FL segment P1, P2 output.
55	O-CD_CLK	O	CD clock output.
56	O-CD_DATA	O	CD data output.
57	O-CD_CE	O	CD chip enable output.
58	P3	O	FL segment P3 output.
59	I-JOG_B	I	Dial jog rotary encoder input B.
60	I-JOG_A	I	Dial jog rotary encoder input A.
61	I-VOL_B	I	Volume rotary encoder input B.
62	I-VOL_A	I	Volume rotary encoder input A.
63	P4/AM10K	O/I	FL segment P4 output / AM10K diode input (Not used).
64	I-TM_BASE	I	Base input for clock.
65	P5/I-AMST	O/I	FL segment P5 output / AM stereo diode input (Not used).
66	P6/I-LW	O/I	FL segment P6 output / LW diode input (Not used).
67	P7/I-$\overline{\text{AUTO2}}$	O/I	FL segment P7 output / DECK2 AUTO STOP switch data input.
68	P8/I-$\overline{\text{AUTO1}}$	O/I	FL segment P8 output / DECK1 AUTO STOP switch data input.
69	P9/I-$\overline{\text{CST2}}$	O/I	FL segment P9 output / DECK2 cassette detect switch data input.
70	P10/I-$\overline{\text{CST1}}$	O/I	FL segment P10 output / DECK1 cassette detect switch data input.
71	P11/$\overline{\text{CAM2}}$	O/I	FL segment P11 output / DECK2 CAM switch data input.
72	P12/I-$\overline{\text{CAM1}}$	O/I	FL segment P12 output / DECK1 CAM switch data input.
73	P13/I-$\overline{\text{REB}}$	O/I	FL segment P13 output / DECK2 side B record OK switch data input (Not used).
74	P14/I-$\overline{\text{REA}}$	O/I	FL segment P14 output / DECK2 side A record OK switch data input.
75	P15/OIRT	O/I	FL segment P15 output / OIRT diode input (Not used).
76	P16/RDS	O/I	FL segment P16 output / RDS input to diode (Not used).
77	P17/R+1	O/I	FL segment P17 output / DECK R+1 diode input (Not used).
78	P18/DEMO	O/I	FL segment P18 output / DEMO diode input (Not used).
79	VDD2	–	Power supply.
80	VLOAD	–	Power supply for FL display.
81	P19/C-JACK	O/I	FL segment P19 output / C-JACK data input (Not used).
82	P20/ECO-OFF	O/I	FL segment P20 output / ECO-OFF data input (Not used).
83	P21/DTS	O/I	FL segment P21 output / DTS diode input (Not used).
84	P22/SW	O/I	FL segment P22 output / SW diode input (Not used).
85 ~ 92	P23 ~ P30	O	FL segment P23 ~ P30 output.
93 ~ 100	G1 ~ G8	O	FL grid G1 ~ G8 output.

ADJUSTMENT <TUNER / FRONT / DECK>

< TUNER SECTION >

1. Clock Frequency Check
   Settings : • Test point : TP2(CLK)
   Method : Set to AM 1710kHz and check that the test point is 2160kHz ± 45Hz.

2. AM VT Check
   Settings : • Test point : TP1(VT)
   Method : Set to AM 1710kHz and check that the test point is less than 8.5V.
   Then set to AM 530kHz and check that the test point is more than 0.6V.

3. FM VT Check
   Settings : • Test point : TP1(VT)
   Method : Set to FM 87.5MHz and check that the test point is more than 0.5V.
   Then set to FM 108.0MHz and check that the test point is less than 8.0V.

4. AM Tracking Adjustment
   Settings : • Test point : TP8(Lch), TP9(Rch)
   • Adjustment location : L951(1/3)
   Method : Set to AM 1000kHz and adjust L951(1/3) to maximum.

5. FM Tracking Check
   Settings : • Test point : TP8(Lch), TP9(Rch)
   Method : Set to FM 98.0MHz and check that the test point is less than 13dBμV.

6. AM IF Adjustment
   Settings : • Test point : TP8(Lch), TP9(Rch)
   • Adjustment location :
   L802 ..... 450kHz.

7. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP3, TP4 (DC Balance)
   TP8(Lch), TP9(Rch) (Distortion)
   • Adjustment location : L801
   • Input level : 60dBμV
   Method : Set to FM 98.0MHz and adjust L801 so that the distortion becomes minimum. Next, check that the voltage between TP3 and TP4 is 0V ± 500mV.

< FRONT SECTION >

8. μ-CON OSC Adjustment
   Settings : • Test point : TP11(KEY-SCAN), (GND)
   • Adjustment location : L951
   Method : Connect a frequency counter across TP11(KEY-SCAN) and GND. Insert AC plug while pressing TUNER function key and POWER key. Then adjust L951 so that the test point becomes 67.708Hz ± 0.068Hz.
   To manual reset press POWER key while pressing CLEAR key.

< DECK SECTION >

9. Tape Speed Adjustment (DECK 2)
   Settings : • Test tape : TTA–100
   • Test point : TP8(Lch), TP9(Rch)
   • Adjustment location : SFR1
   Method : Play back the test tape and adjust SFR1 so that the frequency counter reads 3000Hz ± 5Hz.

10. Head Azimuth Adjustment (DECK 1, DECK 2)
    Settings : • Test tape : TTA–330
    • Test point : TP8(Lch), TP9(Rch)
    • Adjustment location : Azimuth adjustment screw
    Method : Play back (FWD) the 8kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on REV PLAY mode.

11. PB Frequency Response Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–330
    • Test point : TP8(Lch), TP9(Rch)
    Method : Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is within 3dB.

12. PB Sensitivity Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–200
    • Test point : TP8(Lch), TP9(Rch)
    Method : Play back the test tape and check that the output level of the test point is 280mV ± 3dB.

13. REC/PB Frequency Response Adjustment (DECK 2)
    Settings : • Test tape : TTA–602
    • Test point : TP8(Lch), TP9(Rch)
    • Input signal : 1kHz / 8kHz (LINE IN)
    • Adjustment location : SFR351 (Lch)
    SFR352 (Rch)
    Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes -20VU (21mV). Record and play back the 1kHz and 8kHz signals and adjust SFRs so that the output of the 8kHz signals becomes 0dB ± 0.5dB with respect to that of the 1kHz signal.

14. REC/PB Sensitivity Check (DECK 2)
    Settings : • Test tape : TTA–602
    • Test point : TP8(Lch), TP9(Rch)
    • Input signal : 8kHz (LINE IN)
    Method : Apply a 8kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 0VU (210mV). Record and play back the 8kHz signal and check that the output is -1dB ± 3.5dB.

CD TEST MODE

1. How to Start the CD Test Mode

While pressing the FUNCTION button, insert the AC plug to the power outlet.
When the test mode is started, the message [CD TEST] is displayed.

2. How to Exit the CD Test Mode

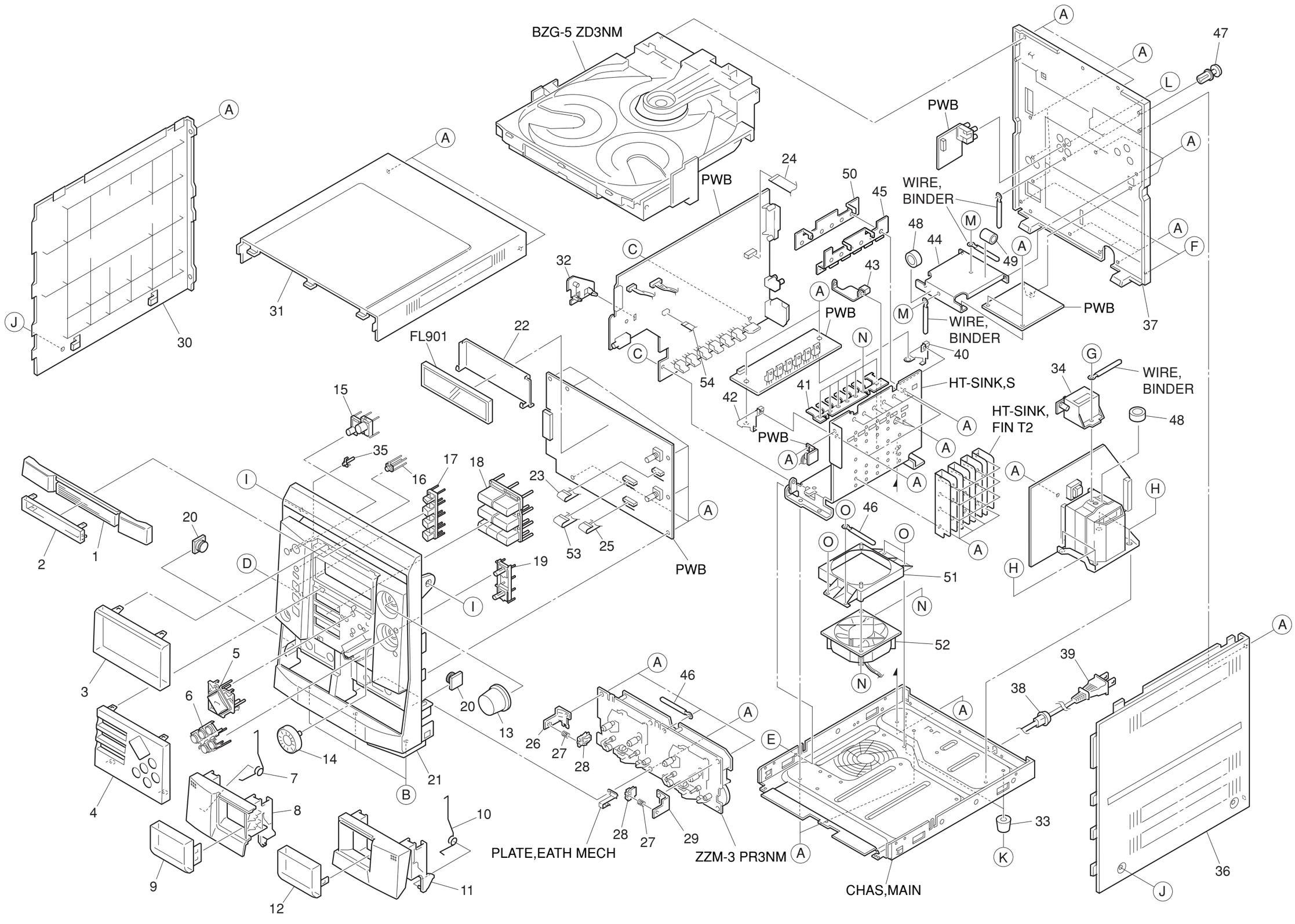
Press the POWER button or disconnect the AC plug.
* When any key other than PRESET is pressed during play mode, the machine exits the test mode.

3. Function Descriptions and Application of the CD Test Mode

No	Mode	Operation	Display	Function	Checking item
1	Start mode		All indicators light	• All FL indicators light	• FL check • Microprocessor check
2	Search mode	CLEAR button	READING	• LD illuminates all the time • Focus search continuous operations *1 • Spindle motor continuous kick	• APC circuit check • Laser current measurement • Focus search waveform check • Focus error waveform check (DRF in the search mode is ignored)
3	Play mode	PRESET button	Normal	• Normal playback • If TOC cannot be read, focus search is continued	• Each servo circuit is checked • DRF check
4	Traverse mode	SET button	Normal	• Tracking servo OFF/ON • Each time PAUSE button is pressed, the tracking servo repeats turning OFF/ON	• Tracking balance check
5	Sled mode	UP button	CD TEST	• Pickup moves to the inner circumference *2 At the same time, lens kicks to the inner circumference	• Sled circuit check • Tracking circuit check • Mechanism operation check • Pickup check
		DOWN button	CD TEST	• Pickup moves to the outer circumference *2 At the same time, lens kicks to the outer circumference	
6	Spindle mode	REC/REC MUTE button	All indicators light	• The spindle motor rotates forward (rough speed) by pressing the button and rotates backward by pressing one more time and stops by pressing again	• Spindle circuit • Spindle motor

*1: The driver IC heats up and the protection circuit starts working when the focus search is continued for 10 minutes or longer. There can be a case that operations cannot be performed correctly.
In such a case, turn off the main power. After cooling down the machine, restart the machine.

*2: Be careful not to damage the gear because the sled motor rotates while the UP or DOWN button is being pressed even if the pick-up is located in the innermost track or the outermost track.


BZG-5 ZD3NM
PWB
WIRE, BINDER
HT-SINK,S
HT-SINK, FIN T2
FL901
PLATE,EATH MECH
ZZM-3 PR3NM
CHAS,MAIN

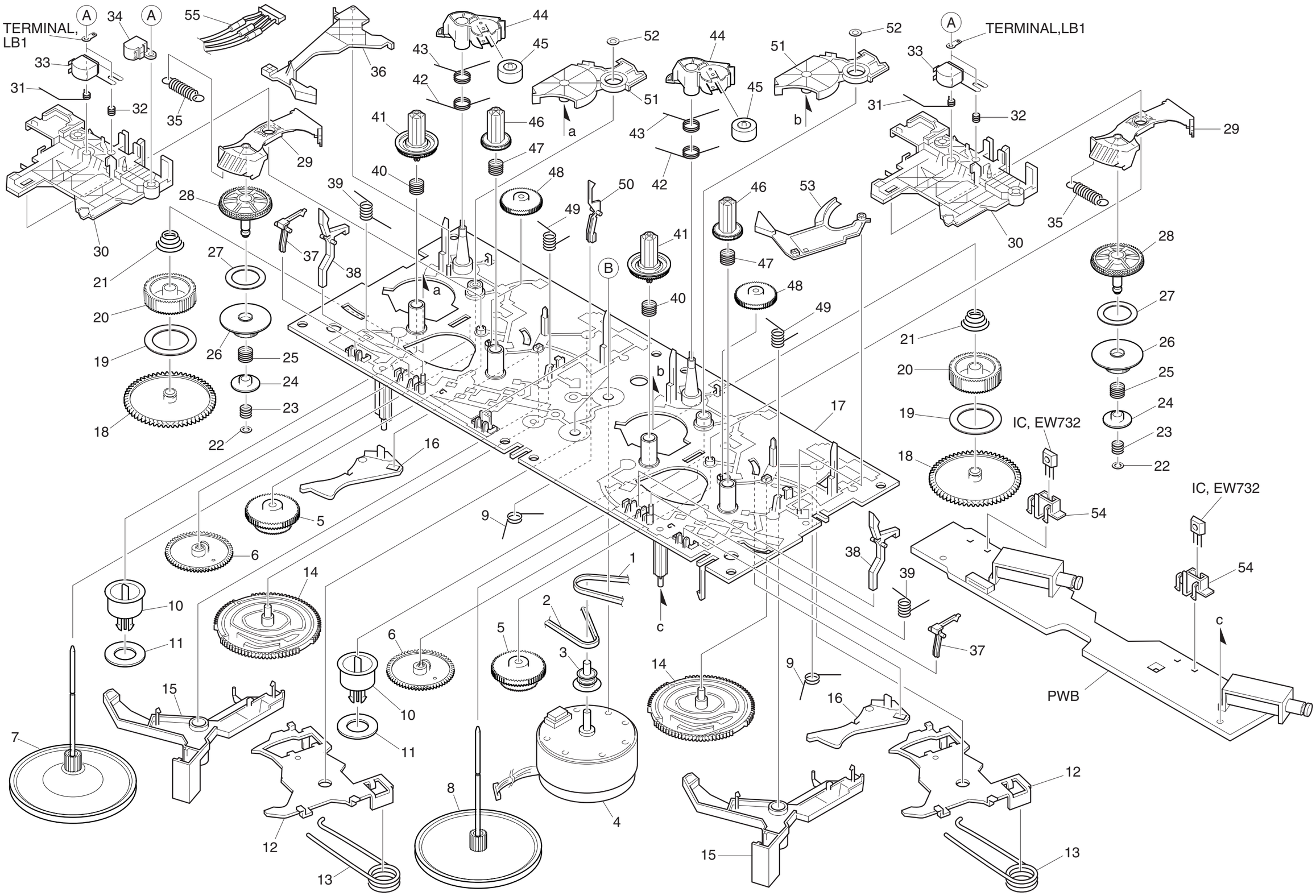
MECHANICAL PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8B-NFK-008-010		PANEL,TRAY
2	8B-NFK-013-010		WINDOW,TRAY
3	8B-NCK-011-010		WINDOW,DISP U<50>
3	8B-NCK-013-010		WINDOW,DISP U DS55<55>
4	8B-NFK-033-010		PANEL,FR U
5	8B-NCK-006-010		KEY,ASSY FUNCTION DD
6	8B-NFK-024-010		KEY,CD
7	8A-NF8-281-010		SPR-T,EJECT 1
8	8B-NFK-003-010		BOX,CASS 1
9	8B-NFK-011-010		WINDOW,CASS 1 1WAY
10	8A-NF8-282-010		SPR-T,EJECT 2
11	8B-NFK-004-010		BOX,CASS 2
12	8B-NFK-012-010		WINDOW,CASS 2
13	8B-NFK-014-010		KNOB,RTRY VOL
14	8B-NFK-015-010		KNOB,RTRY JOG
15	8B-NFK-016-010		KEY,POWER
16	8B-NFK-029-010		LENS,SENSOR
17	8B-NCK-021-010		KEY,DOLBY
18	8B-NFK-018-010		KEY,PLAY 1WAY
19	8B-NFK-026-010		KEY,ENTER
20	8Z-NF6-210-010		DMPR,150 N
21	8B-NCK-001-010		CABI,FR U
22	8B-NFK-201-010		GUIDE,FL
23	88-908-301-110		FF-CABLE,8P 1.25
24	88-906-251-110		FF-CABLE,6P 1.25(RVS-FACE)
25	88-911-101-110		FF-CABLE,11P 1.25
26	87-NF4-216-010		HLDR,LOCK 1
27	86-NF9-224-010		SPR-C,LOCK
28	82-NF5-229-010		PLATE,LOCK
29	87-NF4-217-110		HLDR,LOCK 2
30	8B-NFK-006-010		PANEL,LEFT
31	8B-NFK-040-010		PANEL,TOP
32	8A-NF8-206-010		HLDR,PWB M
33	8A-NHZ-021-010		FOOT,H20
34	8A-DB8-209-010		HLDR,PWB PT
35	8B-NFK-027-010		REFLECTOR,ECO
36	8B-NCK-008-010		PANEL,RIGHT BNC-19
37	8B-NCK-031-010		PANEL,REAR USM<50>
37	8B-NCK-032-010		PANEL,REAR USM DS55<55>
38	87-A91-422-010		BUSHING,AC CORD(U)
⚠ 39	87-A80-149-010		AC CORD ASSY,U BLK
40	8B-NF7-236-010		HLDR,PWB PNRM R
41	8B-NCK-206-010		HLDR,TR 1
42	8B-NF7-235-010		HLDR,PWB PNRM F
43	8B-NCK-209-010		HLDR,PWB AMP
44	8B-NCK-202-010		HLDR,PWB DD
45	8B-NCK-208-010		HLDR,TR AMP
46	87-064-185-010		HLDR,WIRE
47	87-084-079-010		RIVET,NYL 4-5
48	87-A90-457-010		F-BEAD,15-25-15 E251
49	87-A90-173-010		F-BEAD,9-20-21 ZCAT
50	8B-NCK-210-010		HLDR,TR AMP ST
51	8B-NF7-238-010		HLDR,FAN LOW
52	87-A92-117-010		FAN,ASB0812H(DELTA)-400MM
53	88-912-371-110		FF-CABLE,12P 1.25 37
54	88-907-121-110		FF-CABLE,7P 120
A	87-067-703-010		TAPPING SCREW, BVT2+3-10
B	87-067-688-010		BVTT+3-6
C	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
D	87-723-096-410		QT2+3-10W/O SLOT BL
E	87-721-096-410		QT2+3-10 GLD
F	8A-NF7-251-010		W,3.2-8-0.45
G	87-067-689-010		TAPPING SCREW, BVTT+3-8
H	87-078-200-010		S-SCREW,ITC+4-8 R
I	87-721-097-410		QT2+3-12 GLD
J	87-067-641-010		UTT2+3-8(W/O SLOT)BL
K	87-067-698-010		BVT2+3-18(W/O,SLOT)
L	87-067-758-010		BVT2+3-12 W/O SLOT
M	87-067-585-010		BVTT+4-6
N	87-067-579-010		BVT2+3-8 W/O SLOT
O	87-B10-315-010		BVIT3B+3-8 R W/O

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink
LA	Aqua Blue	GL	Light Green	HT	Transparent Gray

TAPE MECHANISM EXPLODED VIEW 1 / 1



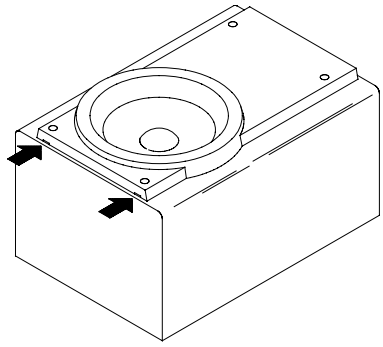
TAPE MECHANISM PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-ZM3-227-010		BELT,MAIN M3
2	8Z-ZM3-235-010		BELT,MAIN L
3	8Z-ZM1-235-010		PULLEY,MOT
4	87-045-347-010		MOT,SHU2L 70
5	8Z-ZM1-232-010		GEAR,IDL FF/REW
6	8Z-ZM3-244-010		GEAR,CAM TD20
7	8Z-ZM3-256-010		FLY-WHL ASSY,M3 R
8	8Z-ZM3-255-010		FLY-WHL ASSY,M3 L
9	8Z-ZM3-231-010		SPR-T,TRIG
10	8Z-ZM3-213-010		CLR,MG
11	82-ZM3-616-010		RING MAGNET 4
12	8Z-ZM3-243-010		LEVER ASSY,HD UP
13	8Z-ZM3-238-010		SPR-T,HD UP
14	8Z-ZM3-219-010		GEAR,CAM M3
15	8Z-ZM3-206-010		LEVER,TRIG
16	8Z-ZM3-209-010		LEVER,CAM FR
17	8Z-ZM3-203-010		CHAS ASSY,M3
18	8Z-ZM1-228-010		GEAR,SLIP T-UP B
19	8Z-ZM1-265-010		FELT,T-UP
20	8Z-ZM1-227-010		GEAR,SLIP T-UP A
21	8Z-ZM1-251-110		SPR-C,T-UP SLIP
22	8Z-ZM1-275-010		W-L,1,47-4-0.25
23	8Z-ZM1-257-010		SPR-C,F/R
24	8Z-ZM1-236-010		CLR,SLIP FF/REW
25	8Z-ZM3-226-010		SPR-C,FR M3
26	8Z-ZM3-250-010		GEAR,SLIP F/R A M3
27	8Z-ZM1-269-010		FELT,FF/REW 2
28	8Z-ZM1-238-110		GEAR,SLIP FF/REW B 2
29	8Z-ZM3-220-010		LEVER,FR M3
30	8Z-ZM3-205-010		LEVER,PLAY M3
31	8Z-ZM3-233-010		SPR-T,BRG M3
32	84-ZM2-227-310		SPR-C,AZIMUTH
33	87-A92-198-010		HEAD,PH HASVH 2504A
34	87-A90-404-010		HEAD,EH LE15B
35	8Z-ZM3-239-010		SPR-E,FR
36	8Z-ZM3-211-010		LEVER,EJECT R
37	8Z-ZM3-225-010		LEVER,STOP
38	8Z-ZM3-221-010		LEVER,CAS
39	8Z-ZM3-234-010		SPR-T,LVR CAS
40	8Z-ZM3-223-010		SPR-C,REEL R M3
41	8Z-ZM1-225-110		GEAR,REEL R
42	8Z-ZM3-240-010		SPR-T,T-UP M3
43	8Z-ZM3-237-010		SPR-T,PINCH M3
44	8Z-ZM3-215-010		LEVER,PINCH M3
45	8Z-ZM1-261-110		ROLLER ASSY,PINCH
46	8Z-ZM1-226-010		GEAR,REEL L
47	8Z-ZM3-222-010		SPR-C,REEL L M3
48	8Z-ZM3-251-010		GEAR,IDL REW M3
49	8Z-ZM3-236-010		SPR-T,PLAY M3
50	82-ZM1-240-110		LVR,REC(*)
51	8Z-ZM3-216-010		LEVER,T-UP M3
52	87-B10-301-010		W-L,1.63-3.2-05 SLIT
53	8Z-ZM3-212-010		LEVER,EJECT L
54	8Z-ZM3-214-010		HLDR,IC
55	86-ZM3-605-110		CONN ASSY,8P -RPB
A	84-ZM2-242-010		S-SCREW,AZ1-2-6.4
B	8Z-ZM2-220-110		V+2.6 ZZM-2

GENERAL SPEAKER DISASSEMBLY INSTRUCTIONS (FOR REFERENCE)

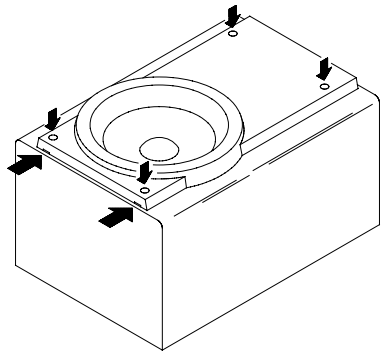
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



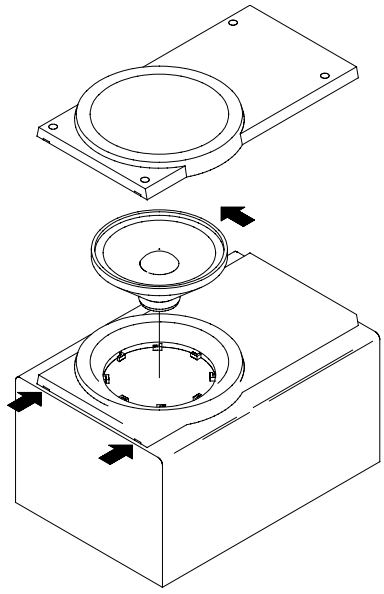
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.

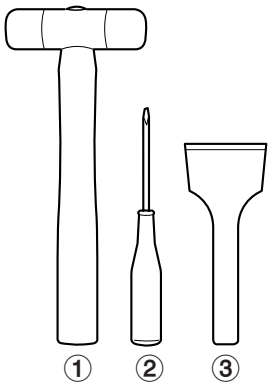


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



Type.4



TOOLS

① Plastic head hammer
② (⊖) flat head screwdriver
③ Cut chisel

How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.

2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.

3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

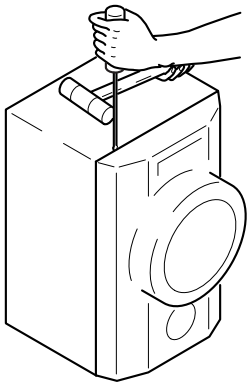


Fig-1

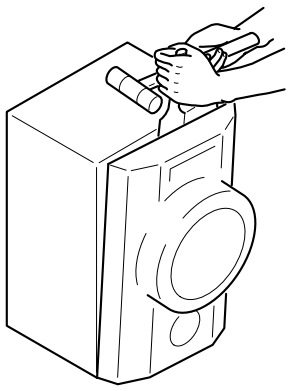


Fig-2

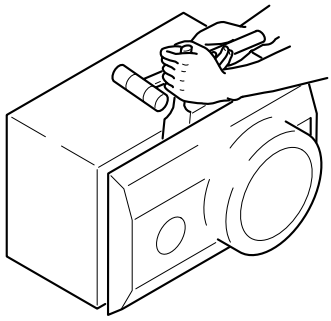


Fig-3

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER PARTS LIST
SX-NAJ502 (YUSC,YUSC9,YUSL)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8B-NS0-001-010		PANEL,FR
2	8B-NS0-003-010		GRILLE,FRAME ASSY
3	8B-NS0-008-010		PROTECTOR,TW
4	8B-NSK-602-010		SPKR,W 160<YUSC>
4	8B-NS0-602-010		SPKR,W 160 30/4<YUSC9,YUSL>
5	87-NSH-612-010		SPKR,CERAMIC ASSY
6	87-NS7-611-010		CORD,SPKR
7	8B-NSK-604-010		SPKR,T 60

SPEAKER PARTS LIST
SX-R290 (YUSC)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8B-YS1-003-010		PANEL,FR
2	8B-YS1-002-010		PROTECTOR,ASSY
3	81-VSA-009-010		CORD,BUSH
4	87-YS6-002-010		SPKR,CORD Y
5	8B-YS1-602-010		SPKR,100 L
6	87-010-384-010		CAP,E 100-25 M SME

SPEAKER PARTS LIST
SX-C610 (YUSC)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8B-YS2-002-010		PANEL,REAR
2	8B-YS2-003-010		PROTECTOR,ASSY
3	81-VSA-009-010		CORD,BUSH
4	83-NSM-010-010		SPKR,CORD
5	8B-YS2-604-010		SPKR,100 L

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8B-NCK-903-010		IB,U(ESF)M
2	87-043-115-010		ANT,FEEDER FM
3	87-006-268-010		ANT LOOP,AM
4	8B-NCK-702-010		RC UNIT,RC-BAS10 VS

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